

Direct Vent Gas Fireplace Models: DVB4136

INSTALLER / CONSUMER SAFETY INFORMATION

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING APPLIANCE

WARNING!

IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

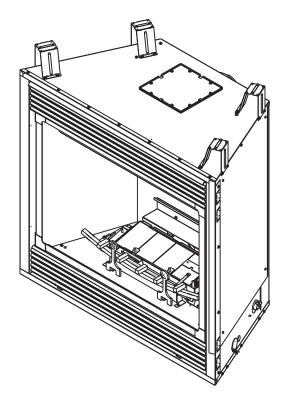
FOR OUR SAFETY

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from your neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

DO NOT STORE OR USE
GASOLINE OR OTHER
FLAMMABLE VAPORS AND
LIQUIDS IN THE VICINITY OF THIS
OR ANY OTHER APPLIANCE.



Homeowner's Installation and Operating Manual





INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

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PLEASE READ THE INSTALLATION & OPERATING INSTRUCTIONS BEFORE USING APPLIANCE.

Thank you and congratulations on your purchase of a CFM Corporation fireplace.

IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

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Installation & Operating Instructions

This gas appliance should be installed by a qualified installer, preferably NFI or WETT (Canada) certified, in accordance with local building codes and with current **CSA-B149.1** Installation codes for Gas Burning Appliances and Equipment. If the unit is being installed in a mobile home, the installation should comply with the current **CAN/CSA Z 240.4** code. For U.S.A Installations follow local codes and/or the current **National Fuel Gas Code. ANSI Z223.1/NFPA 54.**

FOR SAFE INSTALLATION AND OPERATION PLEASE NOTE THE FOLLOWING:

- This fireplace gives off high temperatures and should be located out of high traffic areas and away from furniture and draperies.
- Children and adults should be alerted to the hazards of the high surface temperatures of this fireplace and should stay away to avoid burns or ignition of clothing.
- CAUTION: Due to high glass surface temperature children should be carefully supervised when in the same room as fireplace.

WARNING



HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

- Under no circumstances should this fireplace be modified.
 Parts removed for servicing should be replaced prior to operating this fireplace again.
- 5. Installation and any repairs to this fireplace must be performed by a qualified installer, service agency or gas supplier. A professional service person should be contacted to inspect this fireplace annually. Make it a practice to have all of your gas fireplaces checked annually. More frequent cleaning may be required due to excess lint and dust from carpeting, bedding material, etc.
- Control compartments, burners and air passages in this
 fireplace should be kept clean and free of dust and lint.
 Make sure the gas valve and pilot light are turned off before
 you attempt to clean this fireplace.
- The venting system (chimney) of this fireplace should be checked at least once a year and if needed your venting system should be cleaned.
- Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. This fireplace should not be used as a drying rack for clothing, nor should Christmas stocking or decorations be hung in the area of it.
- 9. Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this fireplace.
- 10. The flow of combustion and ventilation air must not be obstructed in any way.

- 11. When fireplace is installed directly on carpeting, vinyl tile or any combustible material other than wood, this fireplace must be installed on a metal or wood panel extending the full width and depth of the fireplace.
- 12. This fireplace requires adequate ventilation and combustion air to operate properly.
- 13. This fireplace must not be connected to a chimney flue serving a separate solid fuel burning fireplace.
- 14. When the fireplace is not in use it is recommended that the gas valve be left in the OFF position.

WARNING: Check with your electronics manufacturer before installing a television or other electronic device above this fireplace.

DVB4136 Certified To

ANSI Z21.88-2005 / CSA 2.33-2005 Vented Gas Fireplace Heater

This appliance may be installed in an aftermarket permanently located, manufactured home or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indi-cated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

IMPORTANT: PLEASE READ THE FOLLOWING CAREFULLY

Remove any plastic from trim parts before turning the fireplace ON.

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine. It is not unusual for your CFM Corporation gas fireplace to give off some odor the first time it is burned. This is due to the manufacturing process.

Please ensure that your room is well ventilated -open all windows.

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. If the optional fan kit has been installed, place the fan switch in the "OFF" position during this time.

Proposition 65 Warning: Fuels used in gas, woodburning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. California Health & Safety Code Sec. 25249.6

Installation & Operating Instructions

Requirements for the Commonwealth of Massachusetts

All gas fitting and installation of this heater shall only be done by a licensed gas fitter or licensed plumber.

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontally vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW, KEEP CLEAR OF ALL OBSTRUCTIONS".

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

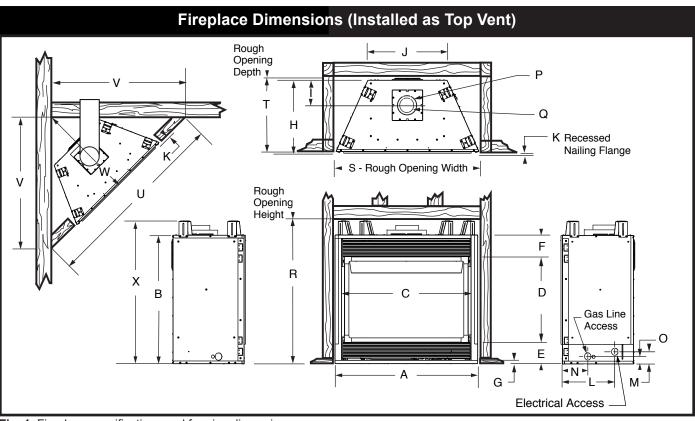


Fig. 1 Fireplace specifications and framing dimensions.

Ref.	DVE	34136
A	40"	(1016 mm)
В	361/8"	(918 mm)
С	361/8"	(918 mm)
D	241/8"	(613 mm)
E	6"	(152 mm)
F	6"	(152 mm)
G	1"	(25 mm)
Н	20%"	(524 mm)
I	7½"	(191 mm)
J	225/8"	(575 mm)
K	5/8"	(16 mm)
L	15"	(381 mm)
M	35⁄8"	(92 mm)
N	71/2"	(191 mm)
0	21/8"	(54 mm)
Р	7"	(178 mm) Dia.
Q	4"	(102 mm) Dia.
Fra	ming Dim	ensions
R	40%"	(1026 mm)
S	401/4"	(1022 mm)
Т	20%"	(524 mm)
U	64¾"	(1645 mm)
V	45¾"	(1162 mm)
W	32%"	(822 mm)
X	40"	(1016 mm)

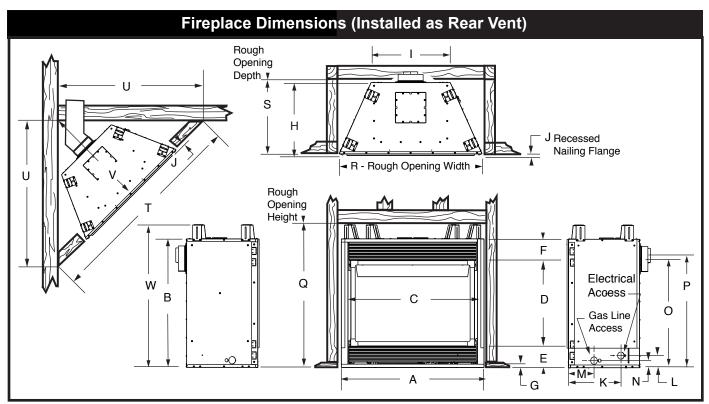


Fig. 2 Fireplace specifications and framing dimensions.

Ref.	DV4136
A	40" (1016 mm)
В	361/8" (918 mm)
С	361/4" (918 mm)
D	241/8" (613 mm)
E	6" (152 mm)
F	6" (152 mm)
G	1" (25 mm)
Н	205%" (524 mm)
1	22%" (575 mm)
J	5/8" (16 mm)
К	15" (381 mm)
L	35%" (92 mm)
M	7½" (191 mm)
N	21/8" (54 mm)
0	30¾" (781 mm)
Р	31%" (803 mm)
Fra	aming Dimensions
Q	40¾" (1026 mm)
R	401/4" (1022 mm)
S	205%" (524 mm)
Т	64¾" (1645 mm)
U	45¾" (1162 mm)
V	32¾" (822 mm)
W	40" (1016 mm)

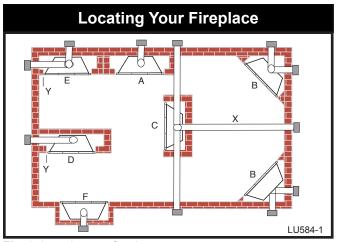


Fig. 3 Locating gas fireplace.

- A) Flat on wall B) Cross corner C) **Island
- D) *Room divider E) *Flat on wall corner F) Chase installation Y) 0" minimum (Check minimum if mantel leg is used)

NOTE (Fig. 3):

- ** Island (C) and Room Divider (D) installation is possible as long as the horizontal portion of the vent system (X) does not exceed 20' (6 m). See details in Venting Section.
- * When you install your fireplace in(D) Room divider or (E) Flat on wall corner positions (Y), a minimum of 6" (152 mm) clearance must be maintained from the perpendicular wall and the front of the fireplace.

Clearance to Combustibles

	_
Top of unit to ceiling	1)
Front of unit to combustibles 36" (914 mm	1)
Appliance	•
Top of standoff 0" (0 mm	1)
Bottom0" (0 mm	
Side0" (0 mm	
Back 0" (0 mm	1)
Venting	
Concentric sections of DV Vent 1" (25 mm	1)
Nonconcentric sections of DV Vent	
Sides and bottom 1" (25 mm	1)
Top 2" (51 mm	1)

Mantels

The height that a combustible mantel is fitted above the fireplace is dependent on the depth of the mantel. This also applies to the distance between the mantel leg (if fitted) and the fireplace.

For the correct mounting height and widths, refer to Figures 4a, 4b and the Mantel Chart below.

The distances and reference points are not affected by the fitting of a bay window front trim kit.

Noncombustible mantels and legs may be installed at any height and width around the appliance. When using paint or lacquer, it must be heat resistant to prevent discoloration.

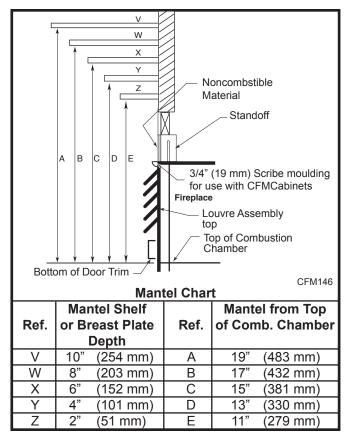


Fig. 4a Combustible mantel minimum installation.

Hearth

A hearth is not mandatory, but is recommended for aesthetic purposes. We recommend a noncombustible hearth which projects out 12" (305 mm) or more from the front of the fireplace.

Cold climate installation recommendation:



When installing this unit against a non-insulated exterior wall or chase, it is mandatory that the outer walls be insulated to conform to applicable insulation codes.

Framing and Finishing



Check fireplace to make sure it is levelled and properly positioned.

To mount the appliance: Choose the location. (Fig. 5)

- 1. This unit comes with four (4) flanges pre-mounted on both sides of the fireplace to allow two different drywall thicknesses to be used. Flange "A" is for 1/2" drywall while flange "B" is for 5/8" drywall.
- Bend the desired flanges out 90° on both sides of the fireplace. Slide the fireplace into the framed opening until the flanges contact the front surfaces of the framing. Level the unit and secure it firmly in place.

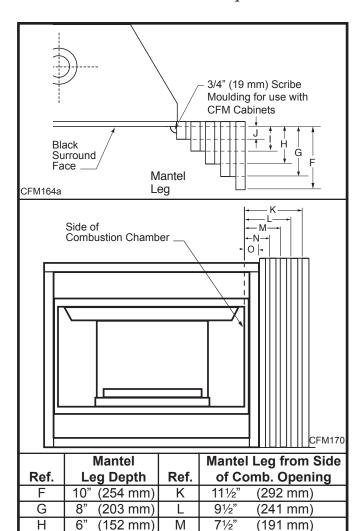


Fig. 4b Combustible mantel leg minimum installation.

Ν

0

(101 mm)

(51 mm)

51/2"

31/2"

(140 mm)

(89 mm)

4"

2"

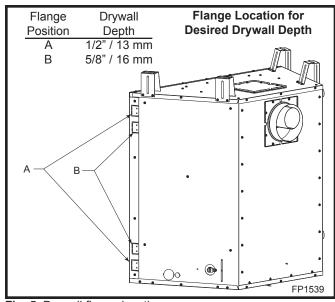


Fig. 5 Drywall flange location.

Final Finishing

Noncombustible materials such as brick or tile can be extended over the edges of the face of the fireplace. Do not cover the window frame assembly, any vent, louvre assembly top or louvre assembly bottom. If a Trim Kit is to be installed, brick and tile will have to be installed flush with the side of this appliance.

Gas Specifications				
Model	Gas Fuel	Control	Max. Input BTU/h	Min. Input BTU/h
DVB4136RN	Natural Gas	Millivolt Hi/Lo	30,000	18,500
DVB4136RP	Propane	Millivolt Hi/Lo	30,000	17,000
DVB4136IN	Natural Gas	24 Volt Hi/Lo	30,000	21,800
DVB4136IP	Propane	24 Volt Hi/Lo	30,000	21,300
DVB4136RFN	Natural Gas	Comfort Control	30,000	21,000
DVB4136RFP	Propane	Comfort Control	30,000	23,500

Gas Inlet and Manifold Pressures			
	Natural	LP (Propane)	
Minimum Inlet Pressure	5.5" w.c.	11.0" w.c.	
Maximum Inlet Pressure	14.0" w.c.	14.0" w.c.	
Manifold Pressure	3.5" w.c.	10.0" w.c.	

High Elevations

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370m) above sea level.

For elevations above 4,500 feet (1,370m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.

In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370m).

Gas Line Installation



When purging gas line the front glass must be removed.

The gas pipeline can be brought in through the right side of the appliance. Knockouts are provided at convenient locations to allow for the gas pipe installation and testing of any gas connection.

The gas line connection can be made with properly tinned 3/8" copper tubing, 1/2" rigid pipe or an approved flex connector. Since some municipalities have additional local codes, it is always best to consult your local authority and the **CSA-B149.1** installation codes.

For USA installations consult the current National Fuel Gas Code, **ANSI Z223.1/NFPA 54**.

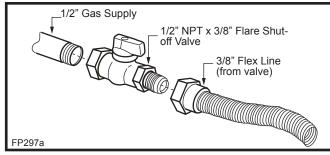


Fig. 6 Typical gas supply installation.



Always check for gas leaks with a mild soap and water solution applied with a brush no larger than 1" (25 mm). Never apply soap and water solution with a spray bottle. Do not use an open flame for leak testing.



The fireplace valve must not be subjected to any test pressures exceeding 1/2 psi. Isolate or disconnect this or any other gas appliance control from the gas line when pressure testing.

The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

When using copper or flex connector use only approved fittings. Always provide a union when using black iron pipe so that the gas line can be easily disconnected for burner or fan servicing. (Fig. 6) See the gas specifications for pressure details and ratings.

Remote ON/OFF Switch Installation

Do not wire the remote ON/OFF wall switch for this gas appliance into a 120v power supply.

- Thread wire through the electrical knockout located on either side of the unit. Take care not to cut the wire or insulation on metal edges. Ensure the wire is secured and protected from possible damage. Run one end of the gas control valve and the other end to the conveniently located wall switch.
- Attach the wire to the ON/OFF switch and install switch into receptacle box. Attach cover plate to switch.
- 3. Connect wiring to gas valve. (Fig. 7)

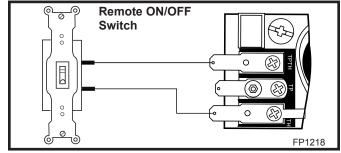


Fig. 7 Remote switch wiring diagram for R models.

Alternate Switch Location

The remote switch can be installed on either side of the access door. Mount the switch to the switch bracket provided. Screw the bracket on either side of the frame, line up the screws with the prepunched holes. (Fig. 8)

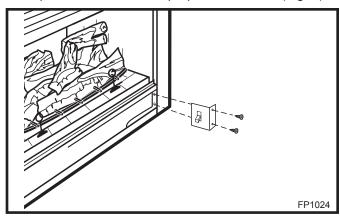


Fig. 8 Alternate switch location.

EB-1 Electrical Box



The fireplace, when installed, must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code.



For USA installations, follow the local codes and the national Electrical Code ANSI/NFPA No. 70.



It is strongly suggested that the wiring of the EB-1 Electrical Junction Box be carried out by a licensed electrician.



Ensure that the power to the supply line has been disconnected before commencing this procedure.

The EB-1 electrical junction box has been supplied standard on the DV360/580 models to allow for the easy installation of an optional fan kit.

To connect the EB-1 box to the house electrical supply, follow the steps below.

- Unscrew the retaining screw from the EB-1 base plate (Fig. 9) and remove the EB-1 assembly from the fireplace.
- 2. Remove the front cover of the EB-1 box.
- Remove the plug socket assembly from the EB-1 box.
- 4. Feed the supply line in from the outside through the cable clamp. (Fig. 9)
- 5. Connect black wire of the power supply line to the brass screw (polarized) of the socket assembly.
- 6. Connect the white wire of the power line to the chrome screw of the socket assembly.

- 7. Connect the ground wire of the supply line to the green screw of the socket assembly.
- 8. Refit the socket assembly back into the electrical box and replace the cover plate. Secure the cable with the clamp on the outside of the unit to prevent strain on the connections.
- 9. The EB-1 electrical junction box is now ready to supply power to the FK12 or FK24 fan kits if fitted.

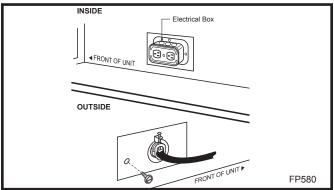


Fig. 9 EB-1 receptacle.

Optional Top Vent Application

The DVB4136 fireplace is shipped as a rear vent unit. If the layout requires a top vent, convert the unit following the steps below.

- 1. Remove the 10 screws securing outer collar adapter to fireplace. (Fig. 10)
- 2. Set outer collar adapter aside.
- 3. Remove insulation from top of unit and discard. Remove the four (4) screws securing flue cover to top of unit and remove flue cover. (Fig. 11)
- 4. Remove the four (4) screws securing flue pipe to back of unit. Remove flue pipe. (Fig. 11)
- 5. Secure flue cover to back of flue outlet. Be sure to replace gasket. (Fig. 13)
- 6. Install flue pipe and gasket removed in step 4 to top of unit with four (4) screws. Be sure to replace gasket. (Fig. 13)
- 7. Secure outer collar adapter to unit with the round collar on top, secure with 10 screws.

NOTE: Be sure not to damage any gasket material.

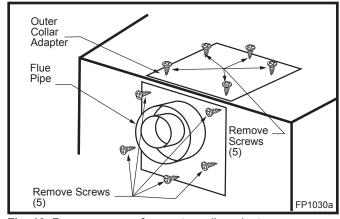


Fig. 10 Remove screws from outer collar adapter.

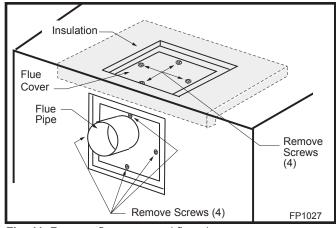


Fig. 11 Remove flue cover and flue pipe.

CAUTION: Remove insulation. Insulation extends



beyond opening in top of unit. Be sure to remove all insulation before completing conversion. Insulation measures 91/4" x 223/4" (23.5 cm x 57.8 cm). If the unit is converted back to a rear vent, the insulation (Part number 20003129) must be replaced.

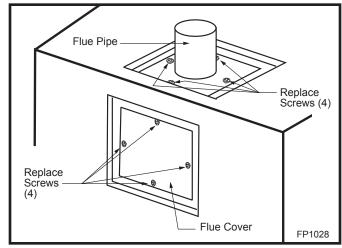


Fig. 12 Replace flue cover and flue pipe.

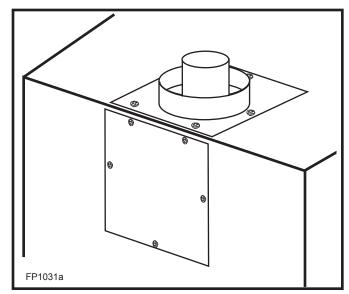


Fig. 13 Complete conversion.



After conversion to top vent configuration, the 4" (102 mm) flue pipe should be concentric within the 7" (175 mm) outer collar.

General Venting

Your fireplace is approved to be vented either through the side wall, or vertical through the roof.

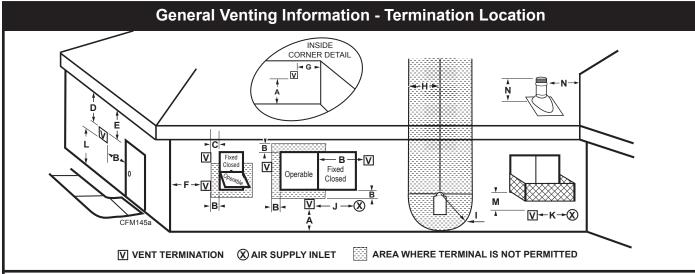
- Only CFM Corporation venting components specifically approved and labelled for this fireplace may be used.
- Venting terminals shall not be recessed into a wall or siding.
- Horizontal venting which incorporates the twist lock pipe must be installed on a level plane without an inclining or declining slope.
- Horizontal venting which incorporates the use of flex venting shall have an inclining slope from the unit of 1" (25 mm) per 24" (610 mm).

There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" (610 mm) from the front of the termination hood. Do not locate termination hood where excessive snow or ice build up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

Location of Vent Termination

It is imperative the vent termination be located observing the minimum clearances as shown on following page.

13



	Canadian Installations ¹	US Installations ²
A = Clearance above grade, veranda, porch, deck, or balcony	12" (30cm)	12" (30cm)
B = Clearance to window or door that may be opened	6" (15cm) for appliances < 10,000Btuh (3kW), 12" (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36" (91cm) for appliances > 100,000 Btuh (30kW)	6" (15cm) for appliances < 10,000 Btuh (3kW), 9" (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12" (30cm) for appliances > 50,000 Btuh (15kW)
C = Clearance to permanently closed window	12" (305mm) recommended to prevent window condensation	12" (305mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2' (610mm) from the center line of the terminal	18" (458mm)	18" (458mm)
E = Clearance to unventilated soffit	12" (305mm)	12" (305mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner (see next page)	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assy
I = Clearance to service regulator vent outlet	3' (91cm)	3' (91cm)
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliances	6" (15cm) for appliances < 10,000 Btuh (3kW), 12" (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36" (91cm) for appliances > 100,000 Btuh (30kW)	6" (15cm) for appliances < 10,000 Btuh (3kW), 9" (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12" (30cm) for appliances > 50,000 Btuh (15kW)
K = Clearance to a mechanical air supply inlet	6' (1.83m)	3' (91cm) above if within 10 feet (3m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m)†	7' (2.13m)†
M = Clearance under veranda, porch, deck or balcony	12" (30cm)‡	12" (30cm)‡

N = Clearance above a roof shall extend a minimum of 24" (610mm) above the highest point when it passes through the roof surface, and any other obstruction within a horizontal distance of 18" (450mm).

- 1 In accordance with the current CSA-B149 Installation Codes
- 2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes
- † A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings
- ‡ only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor:
- NOTE: 1. Local codes or regulations may require different clearances.
 - 2. The special venting system used on Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.
 - 3. CFM Corporation assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

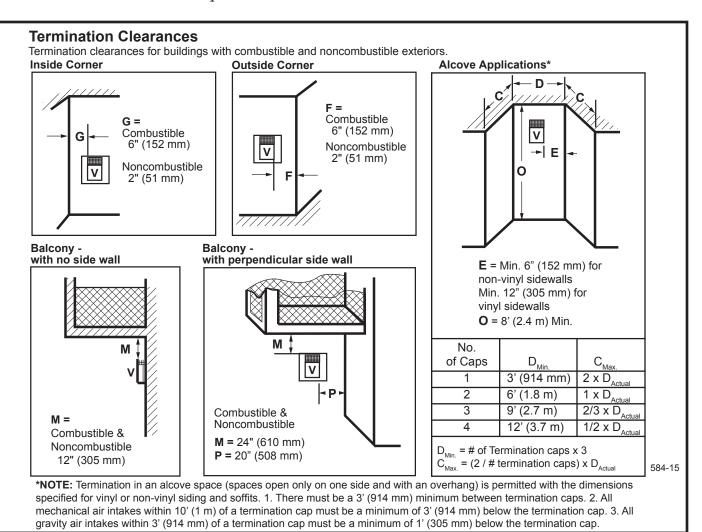


Fig. 15 Termination clearances.

General Information Assembling Vent Pipes

Canadian Installations

The venting system must be installed in accordance with the current CSA-B149.1 installation code.

USA Installations

The venting system must conform to local codes and/or the current National Fuel Code ANSI Z223.1/NFPA 54.

Only venting components manufactured by CFM Corporation may be used in Direct Vent systems.

Flex Vent Pipes

Before joining the flex vent pipe to the unit, apply a bead of high temperature sealant* (provided) to the 4" pipe exiting the fireplace. Secure flex vent piep in place with a hose clamp (provided).

*Be sure the flex pipe overlaps at least 1" (25mm) onto the collars of the fireplace and termination. If the termination has an internal bead, be sure to overlap and secure 1" (25 mm) past the bead. * Be sure the vent is actually crushed before proceeding. Apply a tug to be sure the vent will not slip off the collars

Repeat process with 7" flex vent pipe. The same procedure must be performed on the vent side.

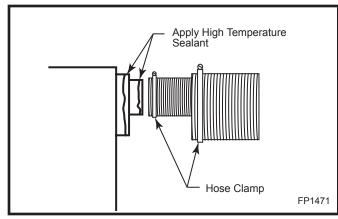


Fig. 16 Apply high temperature sealant to 4" and 7" pipes.

Twist Lock Pipes

When using twist lock pipe it is not necessary to use sealant on the joints. The only areas of the venting system that need to be sealed with high temperature silicone sealant are the sliding joints of any telescopic vent section used in the system.

To join twist lock pipes together, simply align the beads of the male end with the grooves of the female end, twisting the pipe until the flange on the female end contacts external flange on the male end. It is recommended that you secure the joints with three (3) sheet metal screws, however, this is not mandatory with twist lock pipe. (Fig. 17)

To make it easier to assembly the joints, we suggest putting a lubricant (Vaseline or similar) on the male end of the twist lock pipe prior to assembly.

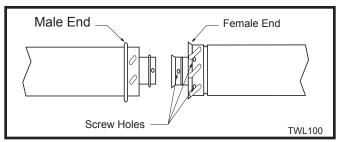


Fig. 17 Twist-lock pipe joints.

How to Use the Vent Graph

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions fo the vent system.

- Determine the height of the center of the horizontal vent pipe exiting through the outer wall. Using this dimension on the Sidewall Vent Graph (Fig. 18), locate the point intersecting with the slanted graph line.
- 2. From the point of this intersection, draw a vertical line to the bottom of the graph.
- 3. Select the indicated dimension, and position the fireplace in accordance with same.

EXAMPLE A:

If the vertical dimension from the floor of the unit is 11' (3.4 m) the horizontal run to the face of the outer wall must not exceed 14' (4.3 m).

EXAMPLE B:

If the vertical dimension from the floor of the unit is 7' (2.1m), the horizontal run to the face of the outer wall must not exceed $8\frac{1}{2}$ ' (2.6 m).

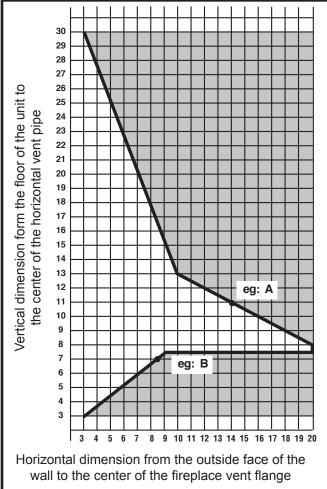


Fig. 18 Sidewall venting graph. (Dimensions in feet)

Refer to Page 20 for venting requirements for snorkels.

Rear Wall Vent Application

When installed as a rear vent unit this appliance may be vented directly to a termination located on the rear wall behind the appliance.

- Only CFM Corporation venting components are approved to be used in these applications (See 'Venting Components' listed for different installation requirements).
- The maximum horizontal distance between the rear of the appliance (or end of the transition elbow in a corner application) and the outside face of the rear wall is 20" (508 mm). (Fig. 19, 20)
- Only one 45° elbow is allowed in these installations.
- Minimum clearances between vent pipe and combustible materials are as follows:

Top - 2" (51 mm) Sides - 1" (25 mm) Bottom - 1" (25 mm)

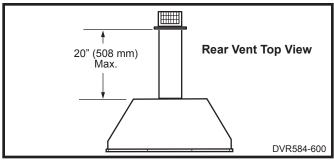


Fig. 19 Rear vent application, no elbows.

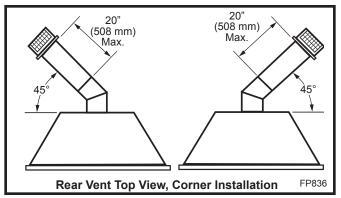


Fig. 20 Rear vent application, one 45° elbow.

Rear Wall Vent Installation Twist Lock Pipe

Step 1

Locate and cut the vent opening in the wall.

For combustible walls first frame in opening. (Fig. 21)

NOTE: When using flex vent, the opening will have to be measured according to the 1" (25mm) rise in 24" (610mm) vertical run.

Combustible Walls: Cut a 10%"H x 9%" W (265 mm x 240 mm) hole through the exterior wall and frame as shown. (Fig. 21)

Noncombustible Walls: Hole opening should be 7½" (191mm) diameter.



Zero clearance sleeve is only required for combustible walls.

Step 2

Measure wall thickness and cut zero clearance sleeve parts to proper length (Maximum 12" / 305 mm). Assemble sleeve to its maximum opening (10%" x 9%") and attach to firestop assembly. (Fig. 22)

Step 3

Measure the horizontal length requirement for the venting including a 2" (51 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (51 mm). (Fig. 19, 20)

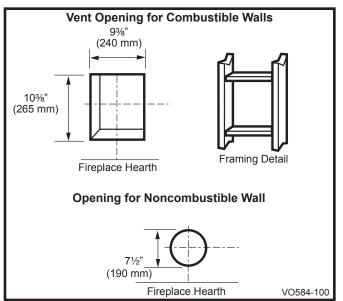


Fig. 21 Locate vent opening on wall.

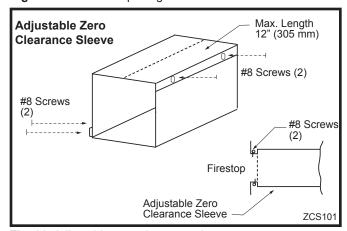


Fig. 22 Adjustable zero clearance sleeve.

Step 4

Install the 4" (102 mm) vent to the appliance collar and secure with 3 sheet metal screws. Install the 7" (178 mm) vent pipe to the appliance collar and secure with 3 sheet metal screws. It is not necessary to seal this connection. If a 45° elbow is being used attach the elbow to the appliance in the same manner then attach the venting to the elbow.



It is critical that there is no downward slope away from the appliance when connecting the vent or elbow.

Step 5

Guide the venting through the vent hole as you place the appliance in its installed position. Guide the 4" (102 mm) and 7" (178 mm) collar of the vent termination into the outer ends of the venting. Do not force the termination. If the vent pipes do not align with the termination, remove and realign the venting at the appliance flue collars. (Fig. 23) Attach the termination to the wall as outlined in the instruction sheet supplied with the termination.

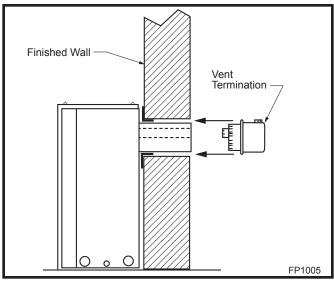


Fig. 23 Side view of final unit location.

Rear Wall Vent Installations - Flex Vent Pipe

Follow Steps 1 and 2 on Page 15.

Step 3

Install the 4" (102 mm) flex vent pipe to the appliance collars described in "General Information Assembling Vent Pipes", Page 12. If the installation requires a 45° angle, grasp the vent pipe close to the appliance collar and bend to 45°. DO NOT exceed 45°. (Fig. 24) Install the 7" vent pipe in the same manner as Step 2.

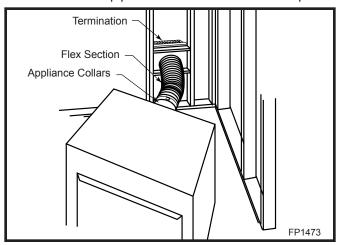


Fig. 24 Grasp the vent pipe close to the collar and bend to 45° angle. Do not exceed 45° .

NOTE: There must be a 1/2" (13 mm) rise in a 12" (305 mm) length of flex vent.

Step 4

Assemble the flex vent to the collars on the termination as you did on the appliance.

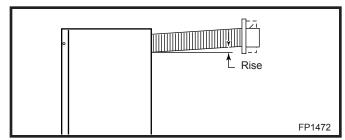


Fig. 25 There must be a 1/2" rise per foot length.

Vertical Sidewall Application

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The Vent Graph, showing the relationship between vertical and horizontal side wall venting, will help to determine the various dimensions allowable.

Minimum clearance between vent pipes and combustible materials is one inch (25 mm) on top, bottom and sides unless otherwise noted.

When vent termination exits through foundations less than 20" (508 mm) below siding outcrop, the vent pipe must flush up with the siding.

It is best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the outer wall.

Horizontal plane means no vertical rise exists on this portion of the vent assembly.



When installing the appliance as a rear vent unit, the 90° or 45° Transition Elbow attached directly to the rear of the unit is NOT INCLUDED in the following criteria and calculations, and unless specifically mentioned should be ignored when calculating venting layouts.

- The maximum number of 90° elbows per side wall installation is three (3). (Fig. 26)
- If a 90° elbow is fitted directly on top of the fireplace flange the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm). (Fig. 27)

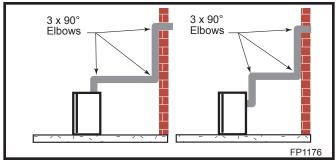


Fig. 26 Maximum three (3) 90° elbows per installation.

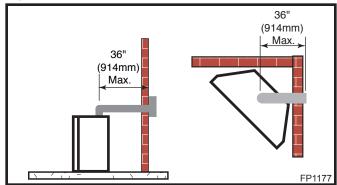


Fig. 27 Maximum horizontal run with no rise.

 If a 90° elbow is used in the horizontal vent run (level height maintained) the horizontal vent length is reduced by 36" (914 mm). (Fig. 28, 29) This does not apply if the 90° elbows are used to increase or redirect a vertical rise. (Fig. 26)

Example: According to the vent graph (Page 14) the maximum horizontal vent length in a system with a $7\frac{1}{2}$ ' (2.3 m) rise is 20' (6 m) and if a 90° elbow is required in the horizontal vent it must be reduced to 17' (5.2 m).

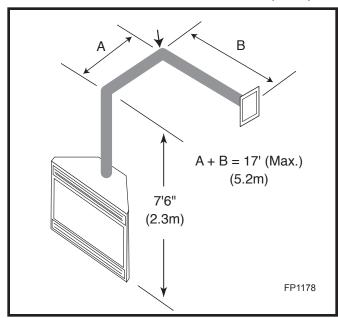


Fig. 28 Horizontal run reduction.

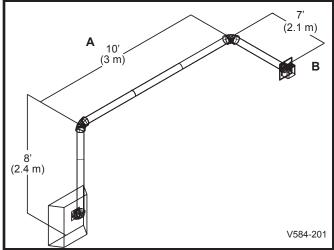


Fig. 29 Maximum vent run with elbows.

In Figures 28 & 29, dimension A plus B must not be greater than 17' (5.2m)

- The maximum number of 45° elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (457 mm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. (Fig. 30)

Example:

Elbow 1 = 90°

Elbow 2 = 45°

Elbow $3 = 45^{\circ}$

Elbow $4 = 90^{\circ}$

Total angular variation = 270°

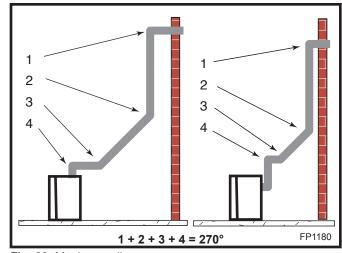


Fig. 30 Maximum elbow usage.

Vertical Sidewall Installation Twist Lock Pipe

Step 1

Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or noncombustible, cut opening to size. (Fig. 31) (For combustible walls first frame in opening.)

NOTE: When using flex vent, the opening will have to be measured according to the 1/2" (13 mm) rise in 12" (305 mm) vent run.

Combustible Walls: Cut a 9%"H x 9%"W (240 mm x 240 mm) hole through the exterior wall and frame as shown. (Fig. 31)

Noncombustible Walls: Hole opening must be 7½" (191 mm) in diameter.

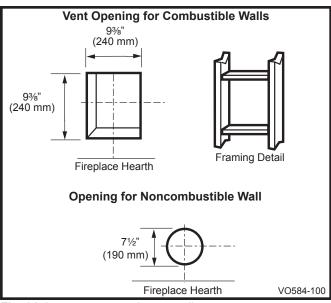


Fig. 31 Locate vent opening on wall.

Step 2

Measure wall thickness and cut zero clearance sleeve parts to proper length (MAXIMUM 12" / 305 mm). Assemble sleeve and attach to firestop with #8 sheet metal screws (supplied). Install firestop assembly. (Fig. 32)



Zero clearance sleeve is only required for combustible walls.

Step 3

Place fireplace into position. Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening. (Fig. 33)

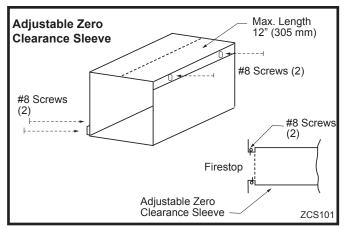


Fig. 32 Adjustable zero clearance sleeve.

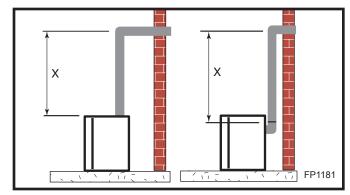


Fig. 33 Vertical height requirements.

Step 4

Apply a band of silicone to the inner and outer flue collars of the fireplace and using appropriate length of pipe section(s) attach to fireplace with three (3) screws. Follow with the installation of the inner and outer elbow, again secure joints with three (3) sheet metal screws. Wipe off any excess high temperature sealant.

Step 5

Measure the horizontal length requirement including a 2" (51mm) overlap, i.e. from the elbow to the outside wall face plus 2" (51mm) (or the distance required if installing a second 90° elbow). (Fig. 34)



Always install horizontal venting on a level plane.

Step 6

Use appropriate length of pipe sections - telescopic or fixed - and install. The sections which go through the wall are packaged with the starter kit, and can be cut to suit if necessary.

Sealing vent pipe and firestop gaps with high temperature sealant will restrict cold air being drawn in around fireplace.

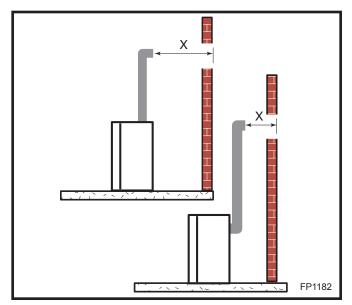


Fig. 34 Horizontal length requirement.

Step 7

Apply high temperature sealant to 4" (102 mm) and 7" (178 mm) collars or the termination one inch away from crimped end. Guide the vent terminations 4" and 7" collard into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination to the wall with screws provided and caulk around the wall plate to weatherproof. As an alternative to screwing the termination directly to the wall, you may also use expanding plugs or an approved exterior construction adhesive. You may also attach the termination with screws through the inner body into the 4" vent pipe, however for this method, you must extend the 4" pipe approximately 6" (152 mm) beyond the outer face of the wall.



Support horizontal pipes every 36" (914 mm) with metal pipe straps.

Vertical Sidewall Installation Flex Vent Pipe

NOTE: The 40" (1016 mm) flex vent is used for 90° off the top of the unit then out the back wall.

Follow Step 1 and 2 on Page 18.

Step 3

Install the four (4) spacer springs on the 4" flex vent pipe. When installing the spacer springs around the 4" pipe, stretch the spring to approximately 15" (381 mm), wrap the spring around the pipe and interlock the ends of the spacer spring approximately 2" (51 mm). Measure $6\frac{3}{4}$ " (172 mm) from the end of the pipe. Place the next spring 5" (127 mm) from the previously installed spring. Place the next spring 6" (152 mm) from the last spring. Finally place the last spring 12" (305 mm) from the last spring installed. (Fig. 35)

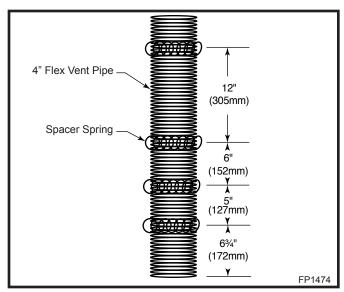


Fig. 35 Install spacer springs.

Step 4

Install the 4" (102 mm) flex vent pipe to the appliance collar as described on Page 13. Secure the end with the first spring 6%" (172 mm) from the flex pipe end to the unit.

Step 5

Slide the 7" (178 mm) flex vent pipe over the 4" flex vent pipe and secure the 7" collar as described on Page 13.

Step 6

Bend the flex pipe horizontal so the bottom of the horizontal pipe measure $6\frac{1}{2}$ " (165 mm) from the top of the unit immediately after the 90° formation. (Fig. 36) Be sure to follow the 1/2" (13 mm) rise in a 12" (305 mm) horizontal run rule.

Step 7

Install the 4" flex then 7" flex to the termination.

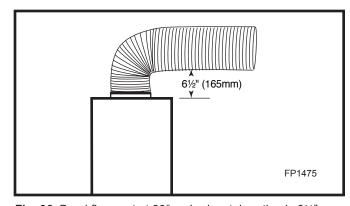


Fig. 36 Bend flex vent at 90° so horizontal portion is $6\frac{1}{2}$ " (165 mm) off top of unit.

Below Grade Installation

When it is not possible to meet the required vent terminal clearances of 12" (305 mm) above grade level, a snorkel kit is recommended. It allows installation depth down to 7" (178 mm) below grade level. The 7" (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure the sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

If installing a snorkel, a minimum 24" (610 mm) vertical rise is necessary. The maximum horizontal run with the 24" vertical pipe is 36" (914 mm). This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24" (610 mm).

- 1. Establish vent hole through the wall (Fig. 31)
- Remove soil to a depth of approximately 16"
 (406mm) below base of snorkel. Install drain pipe.
 Install window well (not supplied). Refill hole with 12"
 (305 mm) of coarse gravel leaving a clearance of approximately 4" (102 mm) below snorkel. (Fig. 37)
- 3. Install vent system.
- 4. Ensure a watertight seal is made around the vent pipe coming through the wall.
- 5. Apply high temperature sealant caulking (supplied) around the 4" and 7" snorkel collars.
- 6. Slide the snorkel into the vent pipes and secure to the wall.
- 7. Level the soil so as to maintain a 4" (102 mm) clearance below snorkel. (Fig. 37)

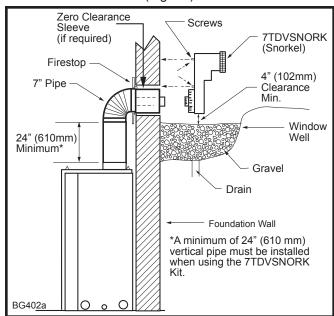


Fig. 37 Below grade installation.



Do not back fill around snorkel.

A clearance of at least 4" must be maintained between the snorkel and the soil.

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8 x 1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. (Fig. 38)

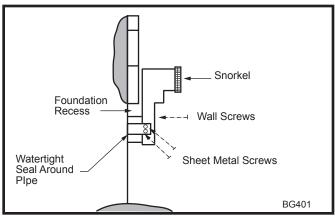


Fig. 38 Snorkel installation, recessed foundation.

Vertical Through-the-Roof Application

This gas fireplace has been approved for:

- Vertical installations up to 40' (12 m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. (Fig. 39)
- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450 mm).

Example: Maximum horizontal length:

No elbows = 10' (3 m) $1 \times 45^{\circ}$ elbow = 8.5' (2.6 m) $2 \times 45^{\circ}$ elbows = 7' (2.1 m)

- A minimum of an 8' (2.5 m) vertical rise is required.
- Two sets of 45° elbow offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. (Fig. 40)
- 7DVCS supports offsets. (Fig. 42) This application will require that you first determine the roof pitch and use the appropriate starter kit. (Refer to Venting Components List)
- The maximum angular variation allowed in the system is 270°. (Fig. 40)
- The minimum height of the vent above the highest point of penetration through the roof is 2' (610 mm). (Fig. 43) Refer to note 2, Page 14.

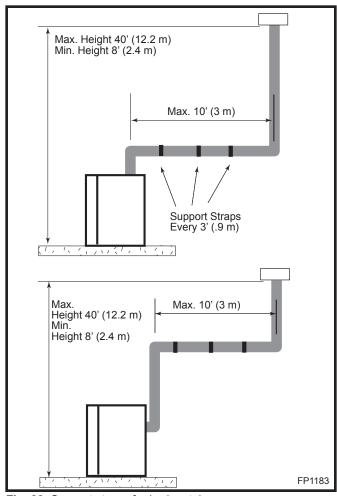


Fig. 39 Support straps for horizontal runs.

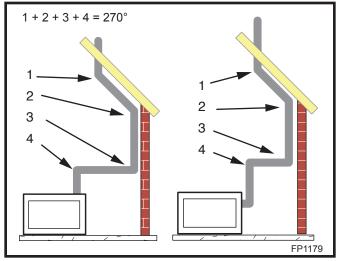


Fig. 40 Maximum elbow usage.

Vertical Through-the-Roof Installation

- 1. Locate your fireplace.
- 2. Plumb to center of the (4") flue collar from ceiling above and mark position.
- 3. Cut opening equal to 9%" x 9%" (240 mm x 240 mm).
- 4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1 inch clearance to the vent pipe, i.e., the hole must be at least 93%" x 93%" (240 mm x 240 mm).
- 5. Place fireplace into position.
- 6. Place firestop(s) #7DVFS or Attic Insulation Shield #7DVAIS into position and secure. (Fig. 41)
- 7. Install roof support (Fig. 42) and roof flashing making sure upper flange is below the shingles. (Fig. 44)
- 8. Install appropriate pipe sections until the venting is above the flashing. (Fig. 44)
- 9. Install storm collar and seal around the pipe.
- Add additional vent lengths for proper height. (Fig. 44)
- 11. Apply high temperature sealant to 4" and 7" collars of vertical vent termination and install.

If there is a room above ceiling level, fire stop spacer must be installed on both the bottom ad the top side of the ceiling joists. If an attic is above ceiling level a 7DVAIS (Attic Insulation Shield) must be installed. The enlarged ends of the vent section always face downward.

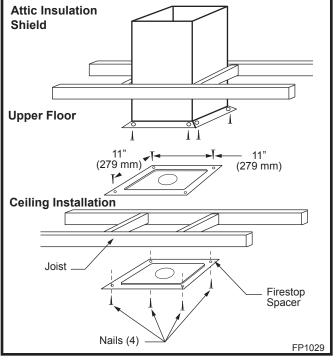


Fig. 41 Place firestop spacer(s) and secure.

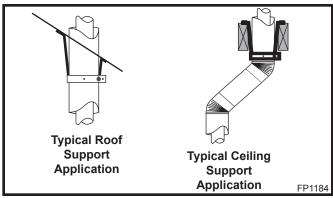


Fig. 42 Venting supports.

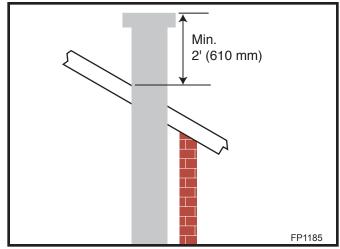


Fig. 43 Minimum termination to roof clearance.

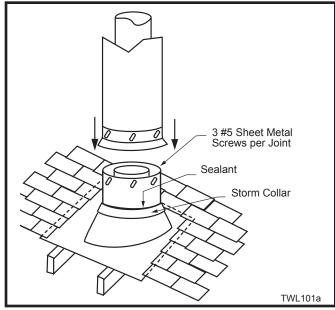


Fig. 44 Roof flashing.

Venting C	omponents
	7TDVRVT - Through the wall Rear Vent Termination
	Starter Kit - Model 7TDVSK - Sidewall Venting (Twist Lock Pipe) Model 7FDVSK - Sidewall Venting (Flex Vent Pipe) Models 7TDVTK/TV - Hot Touch Termination Kits Model 7TDVTK/TV - Cool Touch Termination Kit Starter Kit - Model 7TDVSKV - Vertical Venting for 7TDVSKV-A order 1/12 to 6/12 roof pitch for 7TDVSKV-B order 7/12 to 12/12 roof pitch for 7TDVSKV-F order flat roof Starter Kit for Below Grade Installation Model 7TDVSKS -Snorkel Kit (Twist Lock Pipe) Model 7FDVSKS -Snorkel Kit (Flex Vent Pipe)
	Starter Pipe Model 7TDVP 20/8 - 24" Starter Pipe Bulk Model 7FDVP 30/8 - 30" Flex Pipe Bulk
	45° Elbow 7TDV45 for Rear Vent to Vertical Vent or Vertical/Horizontal Offsets
	90° Transition Elbow 7TDVRT90 for Rear Vent to Vertical Vent 90° Elbow 7TDV90 Vertical/Horizontal Offset
	Telescopic vent sections 7TDVP1117 -11" to 17" adjustable length 7TDVP3567 -35" to 67" adjustable length
	Pipe sections for vertical or horizontal venting Model 7TDVP8" - 4 per box Model 7TDVP12" - 4 per box Model 7TDVP24" - 4 per box Model 7TDVP36" Model 7TDVP48"
	Firestop Spacer Model 7DVFS
	Attic Insulation Shield Model 7DVAIS
	Vertical/Horizontal Combination Offset Support Model 7DVCS

Operating Instructions

Glass Information



Only glass approved by CFM Corporation should be used on this fireplace.

- The use of any non-approved replacement glass will void all product warranties.
- Care must be taken to avoid breakage of the glass.
- Do not operate appliance with glass front removed, cracked or broken.
- Replacement glass (complete with gasket) is available through your CFM Corporation dealer and should only be installed by a licensed qualified service person.

AWARNING



HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

Louvre Removal

To remove louvre assembly top, pull louvre up and then lift out. The louvre assembly bottom is hinged at the bottom edge and swings down. (Fig. 45)

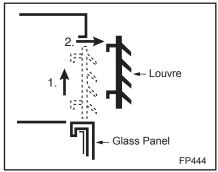


Fig. 45 Remove louvre assembly top.

Window Frame Assembly Removal

- 1. Turn the fireplace OFF (including the pilot).
- 2. If the unit has been operating, allow time for the components to cool.
- 3. Remove louvre assembly top.
- 4. Open the louvre assembly bottom.
- 5. Release the two clamps along lower edge of the frame by pulling down on clamp handles. (Fig. 46)
- 6. Tilt window frame assembly out slightly at the bottom, lift the frame up and away from the fireplace.
- 7. To replace window frame assembly reverse procedure.

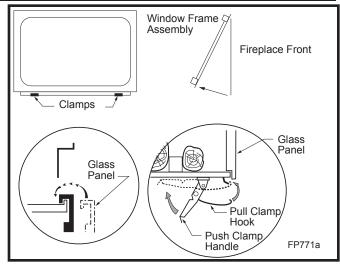


Fig. 46 Window frame assembly removal.

Glass Cleaning

It is necessary to clean the glass periodically. During start-up condensation, which is normal, forms on the inside of the glass and causes lint, dust and other airborne particles to cling to the glass surface. Also initial paint curing may deposit a slight film on the glass. It is therefore recommended the glass be cleaned two or three times with a non-ammonia household cleaner and warm water (gas fireplace glass cleaner is recommended). After the initial cleaning process the glass should be cleaned two or three times during each operating season depending on the environment in the house.



Clean the glass after the first two weeks of operation.

Do not clean glass when hot.

Do not use abrasive cleaners.

Do not strike or slam the glass.

Installation of Optional Ceramic Panels

- 1. Remove glass.
- 2. Remove glass heat shield located at the top of the firebox toward the front.
- 3. Place the rear panel behind the rear log bracket.
- 4. Slide the right and left panels into place, The right and left panels will hold the rear panel in place when positioned properly.
- 5. Replace the glass heat shield.
- Place the right and left hearth refractories and bring them together in the center and slide towards the front of the unit.

Replacement of Ceramic Hearth Panels (if provided)

- 1. Remove glass.
- 2. Set left and right panels on hearth and bring towards front of unit.

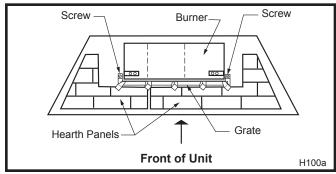


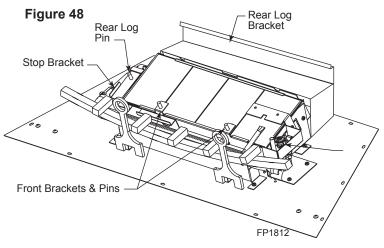
Fig. 47 Hearth panel location (if provided).

Installation of Logs

Remove front glass. (Refer to "Window Frame Assembly Removal" Section, Fig. 46) Remove logs from packaging.



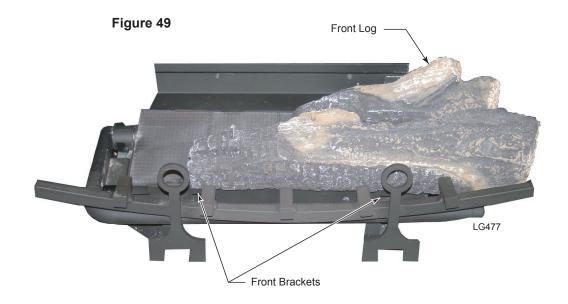
As with all plastics — these are not toys and should be kept away from children and infants.



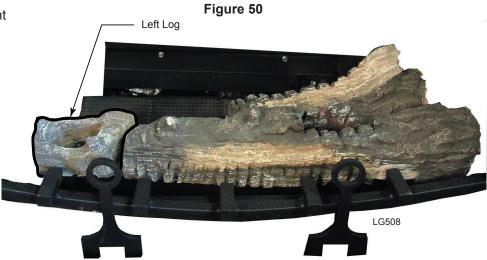
Log Identification Chart			
Logs	Part #	ID#	
Top Right Log	20012595	B162	
Left Log	20012596	B163	
Rear Log	20012597	B164	
Top Center Log	20012598	B165	
Top Front Log	20012599	B166	
Front Log	20012600	B167	

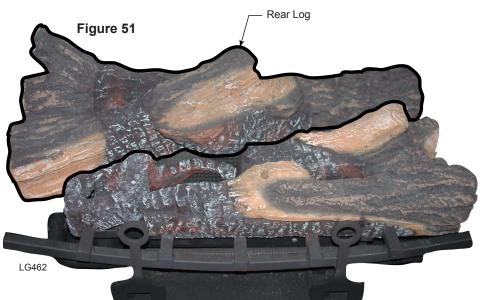
NOTE: Refer to Figure 48 for bracket locations.

1. Place the front log on the pins located on the front brackets. (Fig. 48) Log should look like Figure 49.



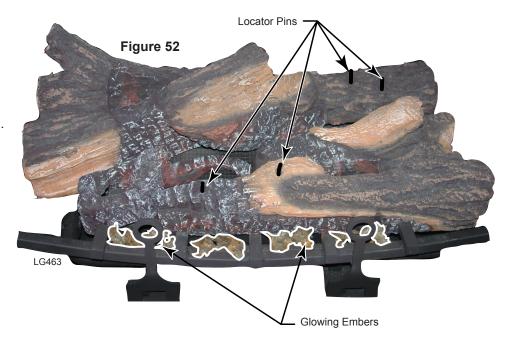
2. Place the left log on the burner by setting the log in the left front corner of the burner up against the brackets. Note the location of the emboss on the log. (Fig. 50)





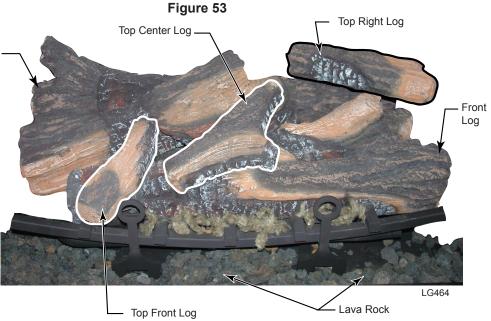
3. Place rear log. The rear log sits in the firebox at an angle toward the left over the rear log bracket and the left side of the burner. (Fig. 48) Set the log on the rear log pin. (Fig. 48) The right side of the log sits on the rear log bracket. Push the right side of the log back as far as it will go. (Fig. 51)

4. Place the glowing embers by building them up lightly between the fettle and the burner tube assembly. (Fig. 52)



- 5. Place the top front log. Set the log by matching the square hole on the bottom with the square emboss on the left log. Lay the log at an angle to the left over the fettle. When this log is in place it must not cover the hole in the le log. (Fig. 53)
- 6. Place the top center log. Hold the log with the pointed end toward the back. Match the two holes on the bottom of the log with the two pins on the top of the front log. (Refer to Figure 52 for pin locations) Set the log and lay it into the rear log. (Fig. 53)
- 7. Place the top right log. Hold the log with pointed end to the left.

 Match the two holes on the bottom of the log with the two pins on the rear log and set the fork on the log over the right front log. (Fig. 53)
- 8. Place the lava rock on the hearth refractory in the front as desired. (Fig. 53)



Flame & Temperature Adjustment

For fireplaces equipped with Hi/Lo valves, flame adjustment is accomplished by rotating the Hi/Lo adjustment knob located near the center of the gas control. (Fig. 54)

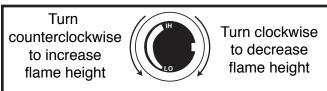


Fig. 54 Flame adjustment knob for SIT valve.

Flame Characteristics

It is important to periodically perform a visual check of the pilot and the burner flames. Compare them to the illustrations below (Figs. 55, 56). If any of the flames appear abnormal call a service person.

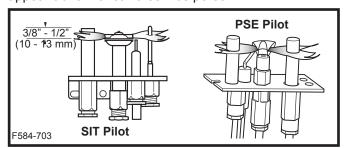


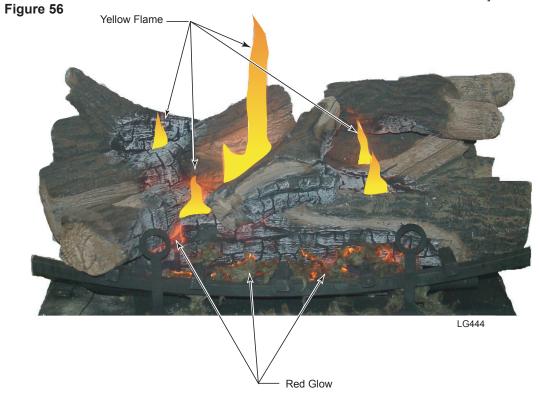
Fig. 55 Correct pilot flame appearance.

Inspecting the Venting System

This appliance venting system is designed and constructed to develop a positive flow adequate to remove flue gases to the outside atmosphere.

Any foreign objects in the venting system, except those designed specifically for the venting system, may cause spillage of flue gases.

To inspect the venting system, make sure the main gas valve is off. Remove window frame assembly (Refer to Window Frame Assembly Removal Section). Using a flashlight, check the area above the baffle in the combustion dome. Clean if necessary.



Lighting and Operating Instructions

For Fireplaces Equipped with the SIT 820 Valve FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING:If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the heater area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any fireplace
- Do not touch any electric switch
- · Do not use any phone in your building
- Immediately call your gas supplier from a neighbor's phone.

Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the Fire Department
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

Lighting Instructions

- 1. **STOP!** Read the safety information above.
- 2. Turn off all electrical power to the fireplace.
- For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the ON/OFF switch to "OFF" position or set thermostat to lowest level.
- 4. Open control access panel.
- 5. Push in gas control knob slightly and turn clockwise to "OFF".







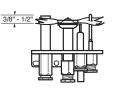
Euro SIT

SIT NOVA

Honeywell

- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
- 7. Remove glass door before lighting pilot. (See Glass Frame Removal section).
- 8. Visibly locate pilot by the main burner.
- 9. Turn knob on gas control counterclockwise to "PILOT".

10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.







- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 11. Replace glass door.
- 12. Turn gas control knob to "ON" position.
- For RN/RP appliances turn the ON/OFF switch to "ON" position or set thermostat to desired setting.
- 14. Turn on all electrical power to the fireplace.

To Turn Off Gas To Heater

- 1. Turn the ON/OFF switch to Off position or set the thermostat to lowest setting.
- 2. Turn off all electric power to the fireplace if service is to be performed.
- 3. Open control access panel.
- 4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
- 5. Close control access panel.

Lighting and Operating Instructions

For Fireplaces equipped with SIT822 Gas Valve (EN or EP)

Warning:If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury and loss of life.

FOR YOUR SAFETY READ THE FOLLOWING WARNINGS BEFORE LIGHTING THE APPLIANCE

- A. This fireplace is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
- **B. BEFORE OPERATING,** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than the air and will settle on the floor.

What to do if you smell gas

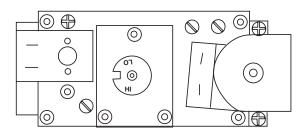
- · Do not try to light any appliance
- Do not operate any electrical switch.
- · Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.

Follow the gas suppliers instructions.

- If you cannot contact your gas supplier call the Fire Department
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand do not try to repair it, call a qualified service technician. Force or attempting repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control that has been under water.

Lighting Instructions

- STOP! Read the safety information above before continuing.
- 2. Turn off all electrical power to the appliance.
- 3. This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
- 4. Access the gas control by lowering the lower access door (louvre assembly).



- 5. Turn the remote switch, if used, OFF. Turn the wireless remote, if used, OFF.
- 6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas STOP. Follow instructions B in the safety warnings above. If you do not smell gas go onto the next step.
- 7. Close the access door.
- 8. Turn ON all electrical power to the appliance.
- 9. Turn remote switch or wireless remote to "ON".
- 10. If the appliance will not operate, follow the instructions TURNING OFF THE GAS TO THE APPLIANCE and call your service technician or gas supplier.

Turning Off the Gas to the Appliance

- 1. Turn the remote switch to the "OFF" position.
- 2. Turn OFF all electrical power to the fireplace if service is required.
- 3 Open the lower access panel.
- 4. Turn the shut-off valve on the flexible gas line to the "OFF" position.

Valve in the on position

Lighting & Operating Instructions

For Fireplaces equipped with AF4000 Gas Valve

Warning: If you do not follow these instructions exactly, a fire or explosion may result, causing property damage, personal injury and loss of life.

For Your Safety, Read the Following Warnings before Lighting the Appliance

- A. This fireplace is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
- B. **BEFORE OPERATING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than the air and will settle on the floor.

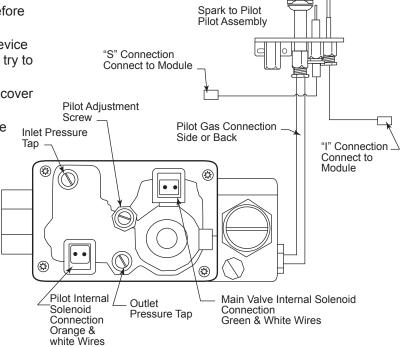
What to do if you smell gas

- Do not try to light any appliance.
- Do not operate any electrical switch.
- · Do not use any phone in your building.

- Immediately call your gas supplier from a neighbor's phone. Follow the gas suppliers instructions.
- If you cannot contact your gas supplier call the Fire Department
- C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control that has been under water.

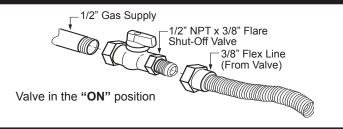
Lighting Instructions

- 1. **STOP!** Read the safety information above before continuing.
- 2. This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
- 3. Access the gas control by removing the side cover access door on the left side of the unit.
- 4. Turn the remote switch, if used, OFF. Turn the wireless remote, if used, OFF.
- 5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP. Follow instruction B in the safety warnings above. If you do not smell gas, go on to the next step.
- 6. Close the access door.
- If the appliance will not operate, follow the instructions TURNING OFF THE GAS TO THE APPLIANCE, and call your service technician or gas supplier.



Turning Off the Gas to the Appliance

- 1. Turn the remote switch to the OFF position.
- 2. Turn OFF all electrical power to the fireplace if service is required.
- 3. Open the lower access panel.
- 4. Turn the shut-off valve on the flexible gas line to the OFF position.



Troubleshooting the Gas Control System

SIT NOVA 820 Millivolt Valve

NOTE: Before trouble shooting the gas control system, be sure external gas shut off is in the "On" position.

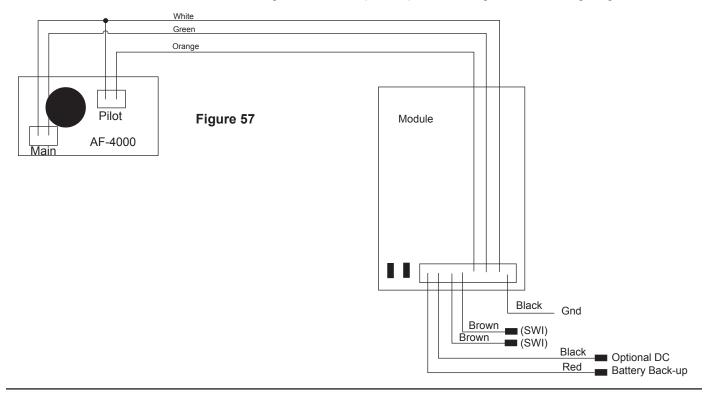
WARNING: Before doing any gas control service work, remove glass front.

		service work, remove glass front.
SYMPTOM 1. Chark igniter will not light	POSSIBLE CAUSES	CORRECTIVE ACTION
Spark ignitor will not light	A. Defective or misaligned electrode at pilot.	Using a match, light pilot. If pilot lights, turn off pilot and push the red button again. If pilot will not light - check gap at electrode and pilot-should be 1/8" to have a strong spark.
	B. Defective ignitor (Push button)	Push Piezo Ignitor Button. Check for spark at electrode and pilot. If no spark to pilot, and electrode wire is properly connected, replace ignitor.
Pilot will not stay lit after carefully following lighting instructions.	A. Defective pilot generator (thermocouple), remote wall switch	Check pilot flame. Must impinge on thermocouple/thermopile. Note: this pilot burner assembly utilizes both-a thermocouple and a thermopile. The thermocouple operates the main valve operation (On and Off). Clean and or adjust pilot for maximum flame impingement on thermopile and thermocouple.
	B. Defective automatic valve	Turn valve knob to "Pilot". Maintain flow to pilot; milivolt meter should read greater than 10 mV. If the reading is okay and the pilot does not stay on, replace the gas valve. Note: An interrupter block (not supplied) must be used to conduct this test.
Pilot burning, no gas to main burner	A. Wall switch or wires defective	Check wall switch and wires for proper connections Jumper wire accross terminals at wall switch, if burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve, if burner comes on, wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivoltage	 Be sure wire connections from thermopile at gas valve terminals are tight and thermopile is fully inserted into pilot bracket. One of the wall switch wires may be grounded. Remove wall switch wires from valve terminals if pilot now stays lit, trace wall switch wiring for ground. May be grounded to fireplace or gas supply. Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 250-300 millivolts (minimum 150) while holding valve knob depressed in pilot position and wall switch "Off". Replace faulty thermopile if reading is below specified minimum.
	C. Plugged burner orifice. D. Defective automatic valve operator.	Check burner orifices for debris and remove. Turn valve knob to "On", place wall switch to "On" millivolt meter should read greater than 100 mV. If the reading is okay and the burner does not come on, replace the gas valve.
Frequent pilot outage problem.	pilot safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermopile and thermocouple.
	B. Possible blockage of the vent terminal.	Check the vent terminal for blockage (recycling the flue gases)

Troubleshooting

AF4000 Valve

If erratic system behavior is observed that cannot be resolved by the methods outlined below, ensure that there is not a transmitter with batteries installed that may be interfering. If a transmitter is packed with batteries installed, its buttons may be depressed sending a constant signal which can interfere with the transmission of desired signals. A transmitter with new batteries can have a range of over 100' (30.4 m). Refer to Figure 57 for wiring diagram.



Module will not learn transmitter

- Ensure the REMOTE/OFF switch on the side of the module (Fig. 58) is set to RE-MOTE.
- Make sure the batteries in both the transmitter and receiver are installed in the proper direction and are not drained. Individual battery voltage should be no less than 1.4V for AA and AAA batteries, 2.8V for button cells, and 9,0V for 12V batteries
- Verify the transmitter indicates a signal is being sent. With thermostat transmitters, the LCD display should indicate ON or OFF depending on which button is being pressed. The LED indicator should illuminate on wall transmitters and on/off handheld transmitters. (Fig. 39) Buttons should be pressed and held for 1 to 2 seconds to ensure a complete signal is sent.
- Make sure the transmitter is within the 20' (6 m) operational range of the receiver.
- Ensure the 4-pin lead-set is securely connected from the battery pack to the control module's AUX connection. (Fig. 59) If the A/C power adapter is used, make sure the leads from the adapter are securely connected to the POWER terminals on the control module. (Fig. 60)
- Press and hold the LEARN button on the module (Fig. 59) for approximately 10 seconds to clear the memory (you should hear a series of beeps from the receiver). Then press and release the learn button (you should hear a single beep from the receiver), immediately press either the ON or OFF button on the transmitter (you should hear a series of beeps indicating the transmitter code has been learned).

Troubleshooting AF4000 Valve (continued)

Figure 58: AF4000 MOD Module Right Side

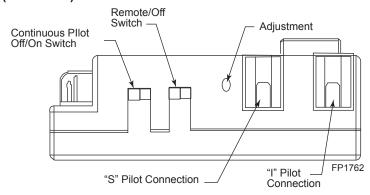
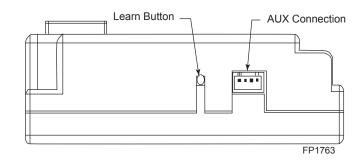


Figure 59: AF4000 MOD Module Left Side



Pilot will not light/stay lit

- Verify the gas supply is turned on.
- Verify the receiver is receiving the signal from the transmitter by listening for a beep from the receiver when ON is pressed on the transmitter. If you do not hear a beep, ensure the module has learned the transmitter (see above).
- Ensure the orange lead from the pilot assembly igniter is securely connected to the terminal labeled "I" and the white lead from the flame rectification sensor is securely connected to the terminal labeled "S" on the control module. (Fig. 58)
- Make sure the orange and white leads from the module are securely connected to the terminals labeled "PILOT" on the valve body. (Fig. 61)
- Ensure the black GROUND wire is securely connected to an appropriate metal portion of the valve or pilot assembly. A proper ground is essential to spark igniter operation.
- Make certain the pilot flame is in contact with the flame rectification sensor on the pilot assembly. This valve is equipped with a pilot flame adjustment screw. (Fig. 61) If the pilot flame is too small it will not contact the flame rectification sensor and will not complete the safety circuit.

Pilot flame is always on/ will not extinguish

 Ensure the CONTINUOUS PILOT switch on the control module (Fig. 58) is set to OFF.

Main flame will not light

- Verify the gas supply is turned on.
- Ensure the pilot flame will ignite. If not, see pilot flame troubleshooting above.
- Make sure the green and white leads from the module are securely connected to the terminals labeled "MAIN: on the valve body. (Fig. 61)
- Make certain the pilot flame is in contact with the flame rectification sensor on the pilot assembly. This valve is equipped with a pilot flame adjustment screw. (Fig. 61) If the pilot flame is too small it will not contact the flame rectification sensor and will not complete the safety circuit.
- Ensure the pilot flame is properly located to ignite the main flame.

Troubleshooting AF4000 Valve (continued)

Flame height adjustment will not work/works backwards

- Ensure the black and red leads from the battery pack or the AF4000 110H/L module are securely connected to the red and black leads from the motor drive or H/L latching solenoid located on the valve body (red to red and black to black).
- Verify the selector switch on the battery pack is set to DC MOTOR DRIVE or LATCHING SOLENOID, depending upon which device is installed.
- Check functionality with all transmitters to determine if there is an issue with the
 main control system or an individual transmitter. If the issue is with an individual
 transmitter, make sure the batteries in both the transmitter and receiver are
 installed in the proper direction and are not drained. Individual battery voltage
 should be no less than 1.4V for AA and AAA batteries, 2.8V for button cells, and
 9.0V for 12V batteries.

Figure 60: AF4000 MOD Module End

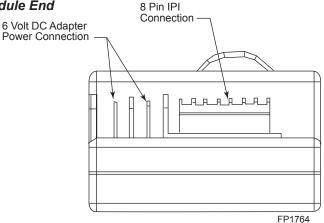
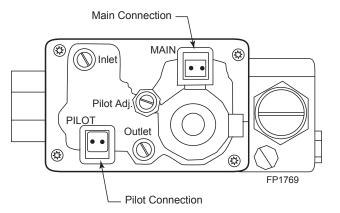


Figure 61: AF4000 Valve Face



Instructions for RF Comfort Control Valve

The Comfort Control Valve allows remote control of temperature, fan and flame appearance.

NOTE: The antenna should hang in free air away from grounded metal.

Operation

- 1. If the manual switch is in remote position, switch it to LOCAL. (Fig. 62)
- Turn the pilotstat knob counterclockwise from OFF to the PILOT position, push the knob down, and hold in position. The pilot valve opens and allows gas to flow to the pilot burner.
- 3. Push plunger on the piezo until the pilot burner is lit. When the pilot burner is lit, the LED on the control will come on after approximately 40 seconds and will be continuously red. When the light turns off which will be approximately 10 seconds after it has been continuously red, the receiver/valve is fully powered.

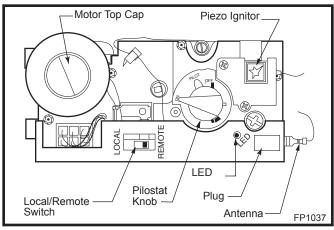


Fig. 62 Comfort control valve.

- 4. Release the knob. The shaft will move upward. The pilot burner should now stay burning. If the pilot burner goes out, repeat step 2.
- 5. Turn the knob counterclockwise to the ON position. If the manual switch is in the LOCAL position, the main burner will turn on immediately.
- 6. ON the initial use of a transmitter, a recognition operation is required between the receiver/valve and transmitter. Change the switch from LOCAL to REMOTE. Press the fan or flame button on the transmitter within 30 seconds. The LED will blink indicating the transmitter will now work with the receiver/valve. If the switch continues in the REMOTE position, the transmitter will now control the main valve, flame modulation level and fan control.
- If the manual switch is in the LOCAL position, the valve will be at the highest fixed pressure setting. The transmitter will control the fan only.

Shut Off Procedure

If the manual switch is in the REMOTE position, the transmitter can shut off the main burner and fan. However, the control is still on and a command from the transmitter can turn on the main burner or fan.

To shut off the system, turn the pilotstat knob clockwise to the OFF position. This action closes the main gas and safety valves. The transmitter cannot turn on the main burner or fan.

Transmitter Operation

Off Mode

In the OFF mode, the fireplace flame and fan are off, the display will show OFF and displays the room temperature. If the receiver is in REMOTE mode, the fireplace will shut off.

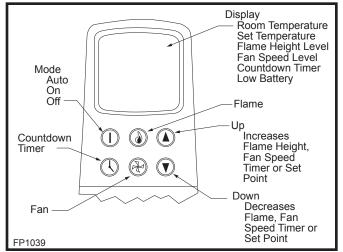


Fig. 63 Transmitter diagram.

On (Manual) Mode

In the ON mode, the room temperature, flame and fan levels will be shown. MANUAL will appear next to both the flame and fan icons.

When the control is in the ON mode, the flame and fan levels, and delay timer are changed with the up and down buttons. To change the flame level, press the flame button followed by an arrow key. To change the fan level, press the fan key followed by an arrow key. Pushing the arrow key once will change the level by one unit.

Delay Timer Mode

The shut off delay timer has a maximum of 2 hours and a minimum of zero minutes. To change the timer level, press the time key followed by an arrow key. Pushing the key once will change the timer by 10 minutes.

Auto Mode

In the AUTO mode, the room temperature, set temperature, flame and fan levels will be shown. AUTO will appear next to both the flame and fan icons.

When the control is in the AUTO mode, the main burner will turn on/off or modulate based on the heat needed to maintain the set temperature. The flame level will change automatically to optimize the heat output needed to maintain the set temperature. To change the set temperature, press the up or down key. Pushing a key once will change the temperature by one degree. In the AUTO mode, the fan speed will increase with increasing flame height or decrease with decreasing flame height. "AUTO" is displayed next to the flame and fan icons.

Fan Override During Auto Mode

If a lower or higher fan speed is desired when operating in the AUTO mode, the fan speed can be overridden by pushing the fan button followed by the up or down key. Pushing a key once will change the fan level by one unit. In this mode "AUTO" is displayed next to the flame icon and "MANUAL" is displayed next to the fan icon.

Change Between F/C Temperature Units

Push the up and down arrow keys simultaneously for at least 3 seconds to toggle between Fahrenheit and Celsius units.

Disable Thermostat Function

To disable the thermostat function in the AUTO mode, push the time and down keys simultaneously for at least 3 seconds.

To Change Batteries

- 1. Remove cover on the backside of the transmitter. Install 3 AAA batteries as shown and reattach cover.
- Once steps 1-3 in OPERATION are completed, receiver/valve and transmitter are now ready. Press any button on transmitter for recognition process to occur between the receiver/valve and transmitter.
- 3. Use functions as described in TRANSMITTER section.

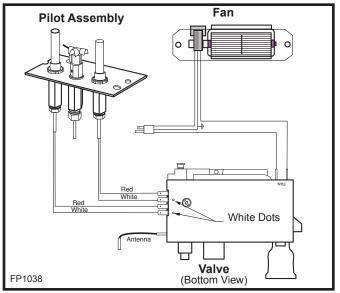


Fig. 64 Comfort Valve wiring diamgram.

Troubleshooting

- 1. Locate LED light on valve.
- 2. LED will blink after every valid command received by the transmitter; this is not an error.
- Failure codes may occur anytime after pilot burner is lit
- 4. Sequence is failure code followed by light not blinking for 30 seconds.
- 5. In the event of multiple failure codes, next failure code follows previous failure code by approximately 3 seconds.

If an Error Code 3 is observed while performing the testing, complete the following:

- Make sure the spade connectors are pushed all the way on. If the Error Code 3 is still showing, then go to the next step.
- Switch the front two thermopile leads with the back two. Be sure the white lead is connected to the spade with the white dot next to it. If the Error Code 3 is still showing, replace the thermopiles.

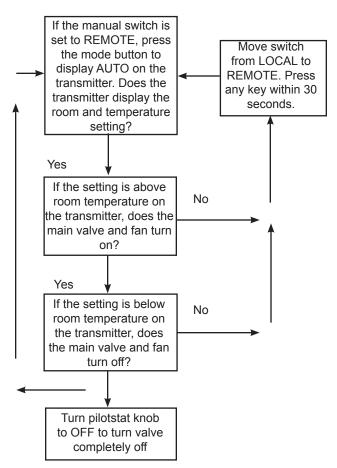
If an Error Code 8 is observed while performing the testing, complete the following:

- 1. Confirm the valve is not in REMOTE mode.
 - If the valve is producing Error Code 8 and in RE-MOTE mode, the valve is defective and should be replaced.
 - If the valve is in LOCAL mode and producing Error Code 8, then go to the next step.
- Slide the Remote/Local switch to REMOTE and teach the valve a transmitter (refer to Item 6, page 29). The Error Code will clear itself after approximately 1½ minutes and return to normal operation.

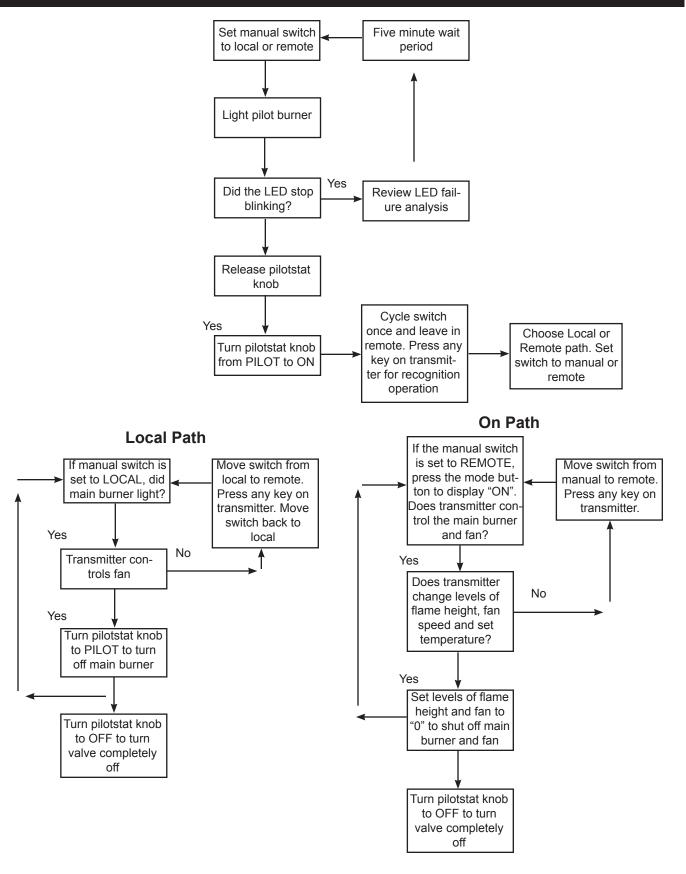
LED Count	Service Action
8	Replace valve
7	Confirm stepper motor connection exists
5	Confirm fan connection exists and works
4	Confirm gas type; jumper in place
3	Replace thermopiles
2	Turn fan ON

NOTE: Some keys are not active.

Auto Path



Comfort Valve System Control Sequence of Operation with Transmitter



Conversions must be completed by qualified personnel

Fuel Conversion Instructions

To convert the DVB4136 units for use with a different gas follow these instructions. Before proceeding, turn control knob on valve to "OFF" and turn gas supply OFF. Turn OFF any electricity that may be going to the appliance.

CAUTION: Logs may be HOT! Allow to cool before proceeding.

- Open louvre assembly bottom to gain access to valve. Remove window frame assembly. (See "Window Frame Assembly Removal", Page 24, Fig. 46)
- 2. Remove logs if previously installed.

SkyTech Valve

- 1. Remove rubber cap from valve. (Fig. 65)
- 2. Push pin in and turn so line on the end of the pin lines up with the appropriate gas. NAT for natural gas and LP for propane.
- 3. Replace cap.
- Remove minimum rate screw and replace with new minimum rate screw supplied in kit. Refer to Table 1 on Page 42.

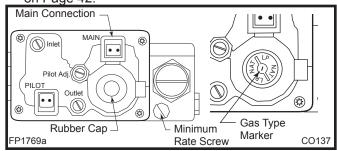


Fig. 65 Remove rubber cap and adjust gas type marker. NOVA SIT820 Valve

1. Using the TORX T20 bit, remove and discard the three (3) pressure regulator mounting screws (A), pressure regulator tower (B) and the spring and diaphragm assembly (C). (Fig. 66)

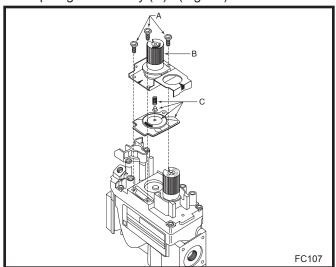


Fig. 66 Remove mounting screws, pressure regulator tower and spring and diaphragm assembly.

- Insure the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten the screws securely. (Ref. torque = 25 in/lb) (Fig. 67)
- 3. Install the enclosed conversion label (F) to the valve body where it can easily be seen. (Fig. 67)

Valve conversion is complete.

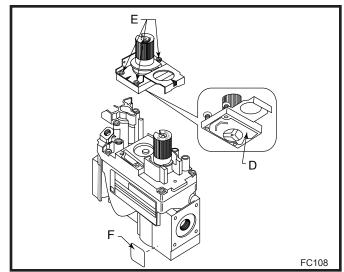


Fig. 67 Replace regulator.

Burner Orifice Conversion

1. Remove the screws that secure the fettle and the burner tube assembly, located behind the burner tube assembly. Remove the three (3) screws that secure the burner housing assembly to the base pan at the right and left end of the burner housing assembly. (Fig. 68)

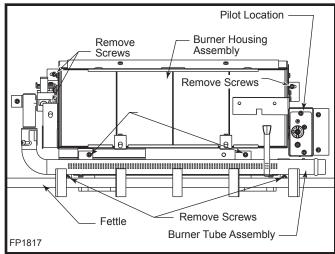


Fig. 68 Remove screws holding burner housing assembly and burner tube assembly.

Remove the fettle and the burner tube assembly. Slide the burner housing assembly to the right and up to free the orifice.

3. Using a 1/2" open end wrench remove the orifices. (Fig. 69)

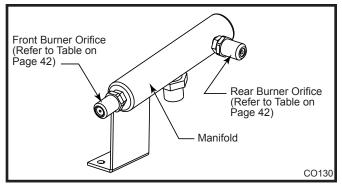


Fig. 69 Burner orifice replacement.

- To convert burner orifices, remove the orifices in the manifold and replace with the proper orifice listed in the table on Page 42.
- To convert the air shutter, refer to the adjustment listed in the table. NOTE: The air shutter on the main burner is changed when converting to different gases.
- 8. Reassemble the burner housing assembly, the burner tube assembly and the fettle in reverse order.

Pilot Orifice Conversion

NOTE: It is not necessary to remove the pilot tube for conversion.

- 1. Remove pilot hood by lifting up. (Fig. 70)
- 2. Remove pilot orifice with Allen wrench. (Fig. 71)
- 3. Install conversion pilot orifice.
- 4. Re-install pilot hood and be sure to align with index tab. Installation is complete.

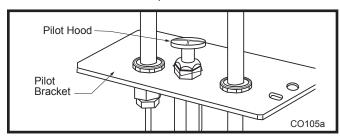


Fig. 70 Remove pilot hood.

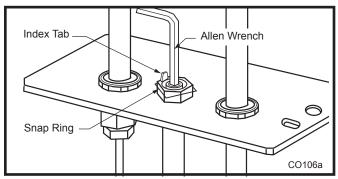


Fig. 71 Remove pilot orifice.

Fuel Conversion Instructions Honeywell Comfort Control Valve ONLY



WARNING: The conversion must only be undertaken by a qualified, certified gas appliance installer.

Installation Precautions

Before proceeding, turn control knob on valve to **OFF** and turn gas supply **OFF**. Turn **OFF** any electricity that may be going to the appliance. **CAUTION:** Logs may be hot!

Conversion Procedure

- Open bottom grille to gain access to valve. Remove glass door. (Refer to "Window Frame Assembly Removal Section" Page 24, Fig. 47)
- Remove logs if previously installed. CAUTION: Logs may be hot!
- 3. Remove and replace plug on lower right hand side of the valve; Red for LP and blue for NG. (Fig. 72)

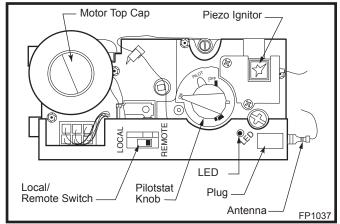


Fig. 72 Comfort control valve.

 Remove motor top cap. Depress and turn center plunger until arrow points to correct screw. Red for LP and Blue for NG. NOTE: Plunger will "snap" into NG position when arrow is close to blue screw. It will not "snap" at LP (Red) position. (Fig. 73)

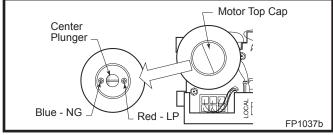


Fig. 73 Depress and turn center plunger.

Burner Orifice Conversion

Refer to Burner Orifice Conversion on Page 40.

Pilot Orifice Conversion

NOTE: It is not necessary to remove the pilot tube for conversion.

1. Loosen pilot hood turning counterclockwise using a 7/16" wrench. (Fig. 74)

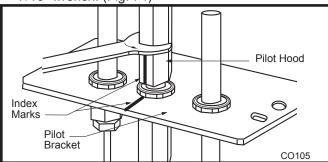


Fig. 74 Remove pilot hood.

- 2. Remove pilot orifice with needlenose pliers. (Fig. 75)
- 3. Install conversion pilot orifice.
- 4. Reinstall pilot hood. Be sure to align pilot hood with index marks.

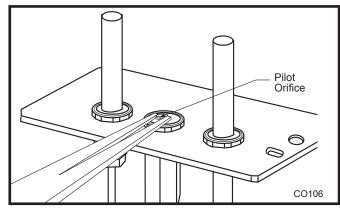


Fig. 75 Remove pilot orifice.

- 5. Turn the gas supply valve and gas valve on and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. Apply water/soap solution with brush only - do not over apply. NEVER test with an open flame.
- 6. Follow procedure on rating plate to light the pilot. Check for leaks.
- 7. Turn main burner on and check for leaks.
- 8. Install logs. Refer to Page 25 for proper log placement.

Installation complete.

	Table 1 Injector Orifice Size Matrix							
		Co	nversion	to Natural (Gas			
	Minimum Burner Orifice				Input (BTU/hr)			
Kit#	Model	Rate Scew	Front	Part #	Rear	Part #	Minimum	Maximum
20013165	DVB4136RP	n/a	#57 (.043")	20002409	#41 (.096")	20004801	18,500	30,000
	DVB4136RFP/IP	No flow restr. 20012264	#57 (.043")	20002409	#39 (.0995")	20013150	18,500	30,000
			Conve	rsion to LP				
	Minimum Burner Orifice				Input (BTU/hr)			
Kit#	Model	Rate Screw	Front	Part #	Rear	Part #	Minimum	Maximum
20013166	DVB4136RN/RFN	n/a	#66 (.033")	55143	#54 (.055")	20002150	17,000	30,000
	DVB4136IN	#54 20013177	#66 (.033")	55143	#53 (.0595")	54833	17,000	30,000

Table 2 Air Shutter Setting				
Model	Fuel Type	Front	Rear	
DVB4136RP/RFP/IP	LP	1/4" Open	Round Hole 1/2 Open	
DVB4135RN/RFN/IN	Natural	1/2" Open	Fully Open	

Maintenance

Burner and Burner Compartment

It is important to keep the burner and the burner compartment clean. At least once per year the logs and lava rock/ember material should be removed and the burner compartment vacuumed and wiped out. Remove and replace the logs as per the instructions in this manual.



Always handle the logs with care as they are fragile and may also be hot if the fireplace has been in use.

FK24/FK12 Fan Assembly

The fan unit requires periodic cleaning. At least once per month in the operating season, open the lower louvre panels and wipe or vacuum the area around the fan to remove any build up of dust or lint.

Brass Trim

Clean the brass trim pieces using a soft cloth lightly dampened with lemon oil. Do not use water or household cleaners on any brass components.

Contact your local representative to arrange an annual service program.

Cleaning the Standing Pilot Control System

The burner and control system consists of

- burner tube
 gas orifice
- pilot assembly thermopile
- · millivolt gas valve

Most of these components may require only an occasional checkup and cleaning and some may require adjustment. If repair is necessary, it should be performed by a qualified technician.



Logs May Be HOT!!

- 1. Turn off pilot light at gas valve side.
- 2. Let fireplace cool if it has been running.
- 3. Remove window frame assembly. (Refer to Window Frame Assembly Removal section)
- 4. Remove logs.
- 5. Vacuum burner compartment especially around orifice primary air openings.
- 6. Visually inspect pilot. Brush or blow away any dust or lint accumulation.
- 7. Reinstall logs.
- 8. Ignite pilot Refer to Lighting Instructions.
- 9. Reinstall window frame assembly.

To obtain proper operation, it is imperative that the pilot and burner's flame characteristics are steady, not lifting or floating.

Typically, the top 3/8" or 1/2" of the thermopile should be engulfed in the pilot flame. (Fig. 76)

To adjust pilot burner; (by qualified service technician)

- 1. Remove pilot adjustment cap.
- 2. Adjust pilot screw to provide properly sized flame.
- 3. Replace pilot adjustment cap.

The primary air shutter is set at factory and should only be adjusted, if necessary, by a qualified service technician.

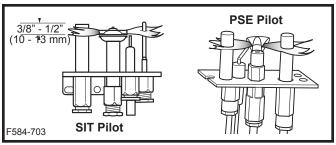
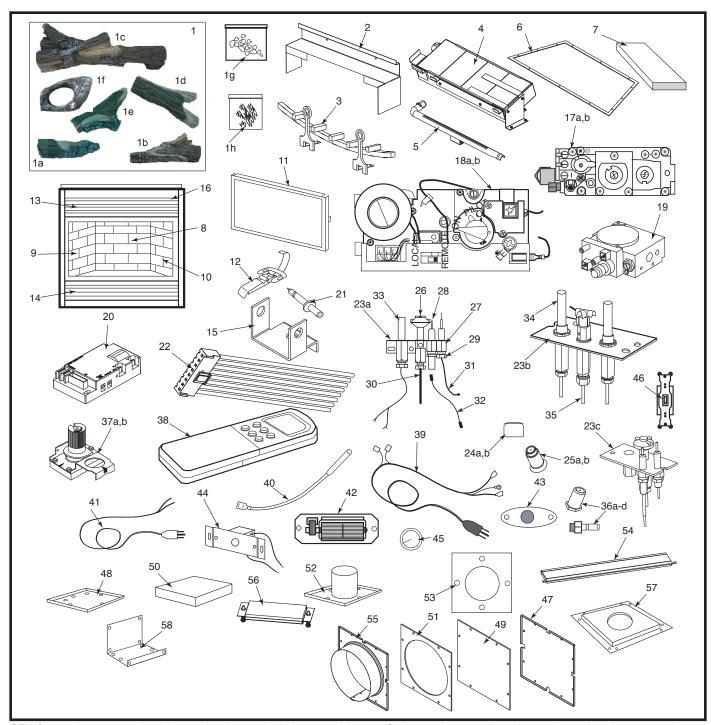


Fig. 76 Correct pilot flame appearance.



CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

$\textbf{DVB4136} \ \, \textbf{Units: GFNR6J0, GFZR6J0, GFSR6J0, GFYR6J0}$

Ref.	Description	DVB4136
1.	Log Set	20012573
1a.	Top Front Log	20012599
1b.	Front Log	20012600
1c.	Rear Log	20012597
1d.	Top Right Log	20012595

DVB4136 (continued)

	B4136 (continued)	
Ref.	Description	DVB4136
1e.	Top Center Log	20012598
1f.	Left Log	20012596
1g.	Volcanic Rock	20000376
1h.	Ember (Package)	51915
2.	Bracket Rear Log	20013027
3.	Fettle	20010490
4.	Burner Housing Assembly	10009958
5.	Burner Tube Assembly	20010580
6.	Burner Tray Gasket	20012436
7.	Ceramic Tile (Single)	57803
8.	Ceramic Panel (Rear)	10010345
9.	Ceramic Panel (Left Side)	10010346
10.	Ceramic Panel (Right Side)	10010347
11.	Door Assembly	20012449
12.	Clamp Frame Window	54174
13.	Top Louvre Assembly	20011867
14.	Bottom Louvre Assembly	20011868
15.	Pivot Bracket	20012232
16.	Hood	20011877
17a.	Valve - SIT 820 - Nat.	20010563
17b.	Valve - SIT 820 - LP	20010645
18a.	RF Valve - 8310E - Nat.	20003719
18b.	RF Valve -8310E - LP	20003720
19.	Valve Assy, VF4010	20013151
20.	Main Module	20011895
21.	Ignitor Piezo	2000062
22.	24" Wire Harness 8 Pin, 8 Wire	20012258
23a.	Pilot Assembly - Nat.	10002264
	Pilot Assembly - LP	10002265
23b.	Pilot Assembly - Nat. (3 Way) RF	20002266
	Pilot Assembly - LP (3 Way) RF	20002268
23c.	Pilot Assembly - SIT Top Conv Nat.	10002387
	Pilot Assembly - SIT Top Conv LP	10002388
24a.	Pilot Orifice #65 - Nat.	10002268
24b.	Pilot Orifice #35 - LP	10002269
25a.	Pilot Orifice - Natural - RF	20000908
25b.	Pilot Orifice - LP - RF	20000907
26.	Pilot Top Convertible	10002266
27.	Hood Pilot 3 Way	10002385
28.	Electrode Ignitor w/Cable	10001297
29.	Nut Electrode	57886
30.	Pilot Tube 1/8" x 24" Long w/fittings (SIT pilot)	10001296
31.	Thermocouple - RN/RP	53373
32.	Cable Ignitor - RN/RP	53194
33.	Thermopile - RN/RP	51827
34.	Thermopile - RF Valve	20002400
35.	Pilot Tube 1/8" x 24" long w/fittings (PSE Pilot)	10003279
36a.	Orifice - Front Burner (#66 / .033") - LP	55143

DVB4136 (continued)

Ref.	Description	DVB4136
36b.	Orifice - Front Burner (#57 / .043") - Nat.	20002409
36c.	Orifice - Rear Burner (#54 / .0585") - LP	20002150 (DVB4136IP/RP)
36c.	Orifice - Rear Burner (#53 / .0595") - LP	54833 (DVB4136IP)
36d.	Orifice - Rear Burner (#41 / .096") - Nat.	20004801 (DVB4136RFN)
36e.	Orifice - Rear Burner (39 / .0995) - Nat.	20013150 (DVB4136IN/RN)
37a.	Regulator Head - Nat.	10001006
37b.	Regulator Head - LP	10001007
38.	Transmitter	20002047
39.	Cord Set (RF Units)	20002541
40.	Antennae HW 395783-1 RFN/RFP Valve	20003561
41.	Electrical Cord (6ft.)	51865
42.	Fan w/Bracket (FK24)	54103
43.	Fan Temp. Sensor	51704
44.	Speed Control	51738
45.	Speed Control Knob	51882
46.	Switch ON/OFF	51842
47.	Flue Cover	20011858
48.	Flue Cover Plate	10002298
49.	Flue Cover Gasket	20011829
50.	Flue Cover Gasket	10002233
51.	Flue Plate Gasket	20011830
52.	Flue Pipe Assembly	20011826
53.	Gasket Plate Cover Flue Pipe	10002237
54.	Plate Relief w/Gasket Assy.	10002429
55.	Outer Collar Assembly	20011865
56.	Plate Relief w/Gasket Assembly Burner Tray	10004192
57.	Firestop	52523
58.	Zero Clearance Sleeve	54623
59.	Sensing Electrode w/Cable EN/EP (not shown)	57885
60.	Tubing 3/8" OD Aluminum (not shown)	20010564
61.	Nut 3/8" ID Brass, Compression (not shown)	7523136
62.	Remote Switch Kit (not shown)	53875
63.	Piezo Ignitor Replacement Kit (not shown)	20000062
64.	Ceramic Refractory Lining Kit (Optional) (not shown)	Refer to Page 48
65.	Air Shutter - Nat. (not shown)	20000129
66.	Air Shutter - LP (not shown)	20000680

Fuel Conversion Kits

Natural Gas to LP

DVB4136RP/RFP/IP Kit #20013166

LP to Natural Gas

DVB4136RN/RFN/IN Kit #20013165

Optional Accessories

Fan Kits

FK12 Fan Assembly

- 1. Open louvre assembly bottom.
- 2. Install FK12 fan in back of unit between hearth supports. (Fig. 77)
- 3. Secure fan on velcro strips.
- 4. Power to the fan can be supplied by plugging the supply lead into a conveniently located wall socket or by using a hard-wired EB-1 connector box.
- 5. Be sure fan motor does not touch hearth supports.

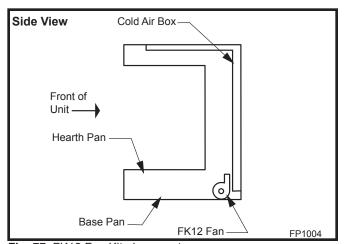


Fig. 77 FK12 Fan Kit placement.

FK24 Fan Assembly

Fan specifications: 120 volt, 60 Hz, .75 Amp. This fan does not need regular maintenance, however periodic cleaning is required. Check the area under the control door and in front of the fan and wipe or vacuum at least once a month during the operating season. Should this fan require servicing, the power supply must be disconnected.

The FK24 comes with the electrical cord attached.

- Slide fan assembly from the left side into the fireplace opening, line up mounting holes with screw studs on back of fireplace and fasten with #10 - 24 hex nuts. (Fig. 78)
- 2. Install thermal sensor on bottom of firebox using #1024 hex nuts.
- (Option A) Place electronic fan speed control box on bottom of fireplace base, lining up mounting holes with screw studs. Fasten fan speed control box with #10 - 24 hex nuts.

(Option B) - The speed control can be installed in an electrical box at normal wall switch height for convenient access.

4. The power supply may be connected in 2 ways:

Method A

Route the 6' (1.8m) lead fitted to the unit to a conveniently located wall socket.

Method B

If the EB-1 receptacle box (Pt. #ZA1200) was correctly connected when the unit was installed, the fan lead can be directly plugged into the EB-1 plug socket.

5. Whether wiring directly to the fan junction box (Option A) or into the EB1 (electrical box, Option B) first ensure cable is secured using box connector.



The fireplace, when installed must be electrically connected and grounded in accordance with local codes, with the current CSA C22.1 Canadian Electrical Code or for US installations, follow local codes and the National Electrical Code, ANSI/NFPA No. 70.

Hard (Direct) Wire Hook Up

First connect ground wire to ground stud located on the base of either box. Black wire from supply should connect to the variable speed switch. Alternate speed switch wire connects to temperature sensor. Alternate lead from sensor connects to fan. Alternate fan lead connects back to the white supply wire. (Fig. 79)



Any electrical rewiring of this fan must be completed by a qualified electrician.

Turn off all power before hook up.

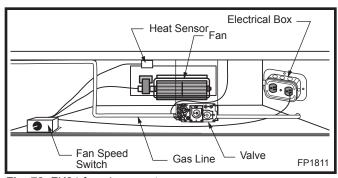


Fig. 78 FK24 fan placement.

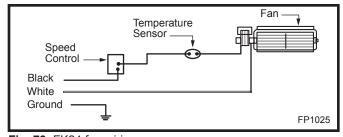


Fig. 79 FK24 fan wiring.

Remote Controls

Optional remote control units are available to control different functions of the appliance.

Model	Functions Controlled
RC1	ON/OFF
RC2	ON/OFF and Temperature
IMTFK	Wall mounted thermostat control

Ceramic Refractory Panels

Ceramic refractory panels are available to line the firebox area.

Kit	Color
DV4136CRB	Classic Black
DV4136CRR	Colonial Red
DV4136CRG	Silver Gray
DV4136CRSS	Sandstone
DV4136CRCG	Country Gray



Take care when handling the refractory panels as they are fragile until held in place and supported.

Installation Instructions

- 1. Remove window frame assembly and logs.
- 2. Remove three (3) screws securing heat shield to combustion dome. (Fig. 80)
- 3. Place rear ceramic panel in back of unit. (Fig. 81)
- 4. Place side panels.
- 5. Replace heat shield, logs and window frame assembly.

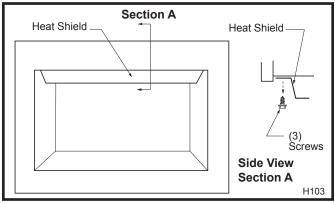


Fig. 80 Heat shield.

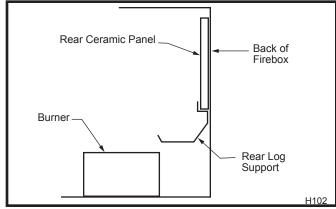


Fig. 81 Rear ceramic panel placement.

Decorative Bay Windows

The bay window kit is available for the DVB4136 only.

Installation

Remove the existing louvre assembly top.

Assemble the Bay Window Kit according to the instructions supplied with the kit. (Fig. 82)

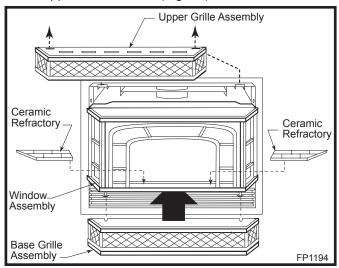


Fig. 82 Bay window.

Decorative Frame Trims

A selection of decorative frame trim kits are available for mounting around the outside of the appliance to enhance its visual effect on the room. Installation instructions for each decorative frame trim are included with the frame trim kit. Contact your authorized distributor for details of the trim kits and ordering information for the trim kits applicable to this model appliance.

Arch/Square Face Kit

for the DV4136

Romanesque - Arch	
41DVARFKB	Black
41DVARFKR	Rustic Bronze
41DVARFKS	Pewter
Romanesque - Square	
41DVSRFKB	Black
41DVSRFKR	Rustic Bronze
41DVSRFKS	Pewter
Marquette - Arch	
41DVAMTKB	Black
41DVAMTKR	Rustic Bronze
41DVAMTKS	Pewter
Marquette - Square	
41DVSMTKB	Black
41DVSMTKR	Rustic Bronze
41DVSMTKS	Pewter

Battery Backup

The use of the battery backup, Model DVTBBK, will allow your fireplace to continue operating in the event electric power lost.

Installation Procedure

CAUTION: If the fireplace has been operating, turn the fireplace off and allow it to cool completely before beginning installation.

- 1. Open bottom louvre. Find the female terminals on the unused red and black colored wires on the wire harness located behind the louvre opening.
- 2. Connect the terminals of the supplied battery holder to the red & black wires respectively.
- 3. Install four (4) fresh "AA" alkaline batteries into the battery holder. Note correct polarity of each battery.
- 4. Place the battery holder on the bottom of the fireplace.
- 5. Installation complete.

LIMITED LIFETIME WARRANTY

PRODUCT COVERED BY THIS WARRANTY

All Vermont Castings gas stoves, gas inserts, and gas fireplaces, and all Majestic brand gas fireplaces equipped with an Insta-Flame Ceramic Burner, or standard steel tube burner.

BASIC WARRANTY

CFM Corporation (hereinafter referred to collectively as the Company) warrants that your new Vermont Castings or Majestic Gas Fireplace/ Stove is free from manufacturing and material defects for a period of one year from the date of purchase, subject to the following conditions and limitations.

EXTENDED LIFETIME WARRANTY

The heat exchanger, where applicable, and combustion chamber of every Vermont Castings or Majestic gas product is warranted for life against through wall perforation. All appliances equipped with an Insta-Flame Ceramic Burner have limited lifetime coverage on the ceramic burner plaque. Warrantees are made to the original owner subject to proof of purchase and the conditions and limitations listed on this Warranty Document

COMPONENT WARRANTY

CAST IRON: All external and internal cast iron parts are warranted for a period of three years.

Note: On porcelain enamel finished external parts and accessories The Company offers no Warranty on chipping of enamel surfaces. Inspect all product prior to accepting it for any damage to the enamel.

The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off.

Dye lot variations with replacement parts and/or accessories can occur and are not covered by warranty.

GLASS DOORS: Glass doors are covered for a period of one year. Glass doors are not warranted for breakage due to misuse or accident. Glass doors are not covered for discoloration or burned in stains due to environmental issues, or improper cleaning and maintenance.

BRASS PLATED PARTS AND ACCESSORIES: Brass parts should be cleaned with Lemon oil only. Brass cleaners cannot be used. Mortar mix and masonry cleaners may corrode the brass finish. The Company will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

GAS VALVES: Gas valves are covered for a period of one year

ELECTRONIC AND MECHANICAL COMPONENTS: Electronic and mechanical components of the burner assembly are covered for one year. All steel tube burners are warranted for one year.

ACCESSORIES: Unless otherwise noted all components and CFM Corporation company supplied accessories are covered for a period of one year.

CONDITIONS AND LIMITATIONS

- This Vermont Castings or Majestic product must be installed or serviced by a qualified installer, preferably NFI or WETT (Canada) certified, as prescribed by the local jurisdiction must perform any installation/service work. It must be installed and operated at all times in accordance with the Installation and Operating instructions furnished with the product. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.
- The customer must pay for any Authorized Dealer in-home travel fees
 or service charges for in-home repair work. It is the dealers option
 whether the repair work will be done in the customer's home or in the
 dealer's shop.
- If upon inspection, the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer parts and/or labor.

- Any part and/or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- This warranty is limited to the repair of or replacement of part(s) found to be defective in material or workmanship, provided that such part(s) have been subjected to normal conditions of use and service, after said defect is confirmed by the Company's inspection.
- The company may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s)
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise of same, will not be covered by this warranty, nor shall the Company assume responsibility for same. Further, the Company will not be responsible for any incidental, indirect, or consequential damages except as provided by law.
- SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- All other warranties-expressed or implied- with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings or Majestic product
- The warranties as outlined within this document do not apply to chimney components or other non CFM Corporation accessories used in conjunction with the installation of this product..
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:
 - a) Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.
 - Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.
- This warranty is void if:
 - The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
 - b) The fireplace has been subjected to prolonged periods of dampness or condensation
 - Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation
 - d) Any alteration, willful abuse, accident, or misuse of the product has occurred.

IF WARRANTY SERVICE IS NEEDED...

- Contact your supplier. Make sure you have your warranty, your sales receipt, and the model/serial number of your CFM Corporation product.
- DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

Canadä



Look for the **EnerGuide**Gas Fireplace Energy Efficiency Rating in this brochure

Based on CSA P.4.1-02

Efficiency Ratings					
Model	EnerGuide Ratings Fireplace Efficiency (%)	Steady Fan-OFF	State (%) Fan-ON	D.O.E. (AFUE%)	
DVB4136RN	62.4	82	83	64	
DVB4136RP	62.4	83	84	64	
DVB4136IN	62.4	82	83	64	
DVB4136IP	62.4	83	84	64	
DVB4136RFN	62.4	82	83	64	
DVB4136RFP	62.4	83	84	64	



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.